FT Weekend

US edition

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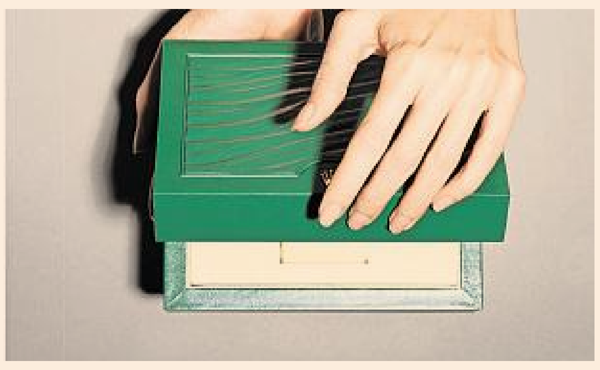
Festive edition

- Quiz of the year
- Short story
- Food & drink

Shop till you drop
Can the US avoid recession?
BIG READ

Lucy Kellaway
Kids, ambition, love and prayer
LIFE & ARTS

In search of a Rolex
The mystery missing watches
LIFE & ARTS



Three falls in the Alps
A true story of death and life
LIFE & ARTS

China battles 250mn Covid cases

● More than half of Beijing infected ● Surge follows lifting of curbs ● Health system overrun

QIANER LIU AND CHENG LENG — HONG KONG
SUN YU — SHANGHAI
RYAN MCMORROW — BEIJING

Chinese officials estimate about 250mn people, or 18 per cent of the population, were infected with Covid-19 in the first 20 days of December, as Beijing dismantled restrictions that contained the disease for almost three years.

The estimates, which include 37mn people infected on Tuesday alone, were revealed by Sun Yang, a deputy director of the Chinese Centre for Disease Control and Prevention in a Wednesday health briefing, according to two people familiar with the matter.

Sun said the rate of Covid spread was still rising and estimated that more than half of the population in Beijing and Sichuan were already infected, the people briefed on the meeting said.

The explosion in cases follows Beijing's decision this month to abandon its zero-Covid policy, which kept the virus at bay through mass testing, mandatory quarantine and draconian lockdowns.

Sun's figures, provided in a closed-door meeting, contrasted with data put out by the National Health Commission, which reported just 62,592 symptomatic Covid cases over the same period.

China stopped publicly tallying the total number of infections last week after authorities curtailed Covid testing.

Washington and the World Health Organization have pushed Beijing to be more open on case counts, disease severity, hospital admissions and other health statistics made widely available by other countries.

US secretary of state Antony Blinken called on China to maintain "transparency" on a call with Chinese foreign minister Wang Yi, according to a US state department summary.

In Beijing and other cities, the Covid wave has overwhelmed hospitals and left emergency rooms and intensive care units with few available beds.

The NHC's official account of the Wednesday event provided little detail on what was discussed. But in the meeting NHC director Ma Xiaowei demanded that hospitals sort out their overflowing emergency rooms, according to one of the participants. He promised that regulators would not hold them accountable for rising fatality rates.

Cases soared in the first 20 days of the month, with almost 37mn people contracting the disease on Tuesday alone

China has officially reported only eight deaths since December 1. Senior health officials said this week they had narrowed the definition of what constituted a Covid death, in a move that reduced the public fatalities tally.

The NHC did not immediately respond to a request for comment.

Zero-Covid exit wave page 4

Kyiv's sorrow
First lady in the line of fire

Serhii Korovayny/FT

Ukraine's first lady Olena Zelenska, pictured in November for the Financial Times in the courtyard of the presidential palace in Kyiv.

During lunch with our correspondent, she recalls the morning of February 24 when Russia's all-out invasion began. "It's started," her husband said when she awoke to the roar of explosions.

She evokes the "euphoria" of Kherson's liberation but warns: "We are, I would say, more worried about our enemy because of his losses." Zelenska discusses her career as a comedy writer and her longing for a normal life while appealing to the world not to forsake Ukraine.

Lunch with the FT Life & Arts

Bethlehem gets back to business after pandemic

There is guarded optimism this year as Bethlehem welcomes the return of tourists to its religious sites. But the past two pandemic-blighted festive seasons have left deep scars on the occupied West Bank city.

Tourists return ▸ PAGE 3
FT View ▸ PAGE 6

● The Financial Times returns on December 28. We wish all our readers a peaceful Christmas holiday period

Meta and Alphabet lose dominance of US digital ads as tech rivals make gains

PATRICK MCGEE — SAN FRANCISCO

Meta and Alphabet have lost their dominance over the digital advertising market they have ruled for years, as the duopoly is hit by fast-growing competition from rivals Amazon, TikTok, Microsoft and Apple.

The share of US ad revenues held by Facebook's parent Meta and Google owner Alphabet is projected to fall by 2.5 percentage points to 48.4 per cent this year, the first time the two groups will not hold a majority share of the market since 2014, according to research group Insider Intelligence.

This will be the fifth consecutive annual decline for the duopoly, whose market share has fallen from a peak of 54.7 per cent in 2017 and is forecast to drop to 43.9 per cent by 2024. Meta and Alphabet's worldwide share fell 1 percentage point to 49.5 per cent this year.

Jerry Dischler, head of ads at Google, told the Financial Times that fierce rivalry from new entrants reflects an "extremely dynamic ad market".

Regulators in the US and Europe have added antitrust scrutiny such as pursuing Google for allegedly promoting its products over rivals. In December, Facebook owner Meta was served with a complaint from EU watchdogs over concerns that the social network's classified advert service is unfair to rivals.

Tech groups are fighting harder than ever for a share of the $300bn digital ads market, even as companies cut ad budgets in response to rising interest rates and high inflation. Amazon and Apple have expanded their advertising teams. In July, Netflix announced it would partner Microsoft to build an adverts-supported tier of its streaming service.

Meta chief executive Mark Zuckerberg has blamed revenue falls on Apple's privacy changes that make it harder to track users and target advertising, as well as the popularity of viral videos app TikTok, owned by Chinese parent ByteDance. "Four years ago, you wouldn't be talking about either [TikTok or Amazon] in advertising," said Dischler.

Since 2015 Amazon has seen ad revenues shoot from less than $1bn to an estimated $38bn this year. Apple's revenues have grown from under $2.2bn in 2018 to more than $7bn this year.

Insider Intelligence has forecast that Google and Meta's US ad growth in 2023 will be 3 per cent and 5 per cent, respectively, while at least eight of its rivals are to make double-digit gains.

TikTok tracked FT journalist page 9
Lex page 16

World Markets

STOCK MARKETS

	Dec 23	Prev	%chg
S&P 500	3831.64	3822.39	0.24
Nasdaq Composite	10453.27	10476.12	-0.22
Dow Jones Ind	33118.19	33027.49	0.27
FTSEurofirst 300	1688.62	1689.34	-0.04
Euro Stoxx 50	3816.60	3823.29	-0.17
FTSE 100	7473.01	7469.28	0.05
FTSE All-Share	4083.66	4079.25	0.11
CAC 40	6504.90	6517.97	-0.20
Xetra Dax	13940.93	13914.07	0.19
Nikkei	26235.25	26507.87	-1.03
Hang Seng	19593.06	19679.22	-0.44
MSCI World $	2595.25	2626.92	-1.21
MSCI EM $	964.06	952.98	1.16
MSCI ACWI $	604.39	610.14	-0.94
FT Wilshire 2500	4958.89	5031.95	-1.45
FT Wilshire 5000	38723.61	39291.47	-1.45

CURRENCIES

Pair	Dec 23	Prev	Pair	Dec 23	Prev
$/€	1.061	1.060	€/$	0.942	0.943
$/£	1.206	1.203	£/$	0.829	0.831
£/€	0.880	0.881	€/£	1.136	1.135
¥/$	132.850	132.255	¥/€	141.000	140.197
¥/£	160.224	159.090	£ index	77.975	78.401
SFr/€	0.991	0.986	SFr/£	1.126	1.119

CRYPTO

	Dec 23	Prev	%chg
Bitcoin ($)	16834.33	16815.30	0.11
Ethereum	1217.45	1217.46	0.00

COMMODITIES

	Dec 23	Prev	%chg
Oil WTI $	79.59	77.49	2.71
Oil Brent $	83.45	80.98	3.05
Gold $	1800.70	1817.55	-0.93

GOVERNMENT BONDS

Yield (%)	Dec 23	Prev	Chg
US 2 yr	4.31	4.22	0.09
US 10 yr	3.73	3.67	0.06
US 30 yr	3.81	3.74	0.07
UK 2 yr	3.66	3.69	-0.03
UK 10 yr	3.62	3.59	0.03
UK 30 yr	3.89	3.87	0.02
JPN 2 yr	0.01	0.00	0.01
JPN 10 yr	0.38	0.39	-0.02
JPN 30 yr	1.51	1.54	-0.03
GER 2 yr	2.60	2.55	0.06
GER 10 yr	2.38	2.36	0.03
GER 30 yr	2.26	2.23	0.04

Prices are latest for edition
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INTERNATIONAL

WORLD WEEK IN REVIEW

UN reaches biodiversity accord covering nearly one-third of planet

The UN COP15 biodiversity summit has reached an agreement to protect almost a third of the planet's lands and oceans by 2030, despite the deep divide between wealthy and developing countries that has dogged UN climate and nature negotiations.

On Monday a framework was signed off by almost 200 countries that would safeguard at least 30 per cent of the world's land, inland waters, coastal areas and oceans by 2030. Presently, 17 and 10 per cent of land and marine areas respectively are under protection. European Commission president Ursula von der Leyen said the deal at the two-week gathering was a "road map to protect and restore nature" that complemented the Paris Agreement for climate. Unlike that, however, the pact is not legally binding.

Germany opens LNG terminal in effort to end dependence on Russia

Germany has opened its floating liquefied natural gas terminal in the North Sea port of Wilhelmshaven, marking a crucial milestone in its quest for energy independence from Russia. The Esperanza, a specialised ship the length of nearly three football fields, is carrying 162,000 cubic metres of gas, much of it originally from the US, enough to supply 50,000 households with gas for a year. Over the coming weeks it will be reconverted to gas and fed into Germany's onshore pipeline network.

Chancellor Olaf Scholz said that Germany would soon have an LNG import capacity of 30 bcm/y on its northern coasts. "That is equivalent to more than half of the entire volume of pipeline gas that flowed to Germany from Russia last year," he said.

South Africa president Ramaphosa re-elected ANC leader amid scandal

South Africa's president Cyril Ramaphosa, centre, has been re-elected as leader of the governing African National Congress, securing a second term despite a damaging scandal over a theft at his game farm.

Universities warned of AI program that raises risk of student cheating

Universities are being urged to safeguard against the use of artificial intelligence to write essays after the emergence of a sophisticated chatbot that can imitate academic work, leading to a debate over better ways to evaluate students in the future.

ChatGPT, a program created by Microsoft-backed company OpenAI that can form arguments and write convincing swaths of text, has led to widespread concern that students will use the software to cheat on written assignments. Academics, higher education consultants and cognitive scientists across the world have suggested universities develop new modes of assessment in response to the threat to academic integrity posed by AI.

Economic data

US spending slows as inflation eases

Fed likely to maintain rate rise policy despite decline in price pressures

ALEXANDRA WHITE AND STEFF CHÁVEZ — NEW YORK

Spending by US households and businesses stalled in November, while a slight easing in price pressures left inflation at levels unlikely to make the Federal Reserve soon pause its aggressive campaign to raise interest rates.

Personal spending rose 0.1 per cent in November from a month earlier, according to commerce department data released yesterday. That missed economists' expectations for a 0.2 per cent rise and was down from an upwardly revised 0.9 per cent jump in October.

The slight increase in spending was accompanied by a series of other economic figures yesterday, including a slowdown in the Fed's preferred gauge of inflation in November and a muted increase in a popular proxy for business investment.

An index of consumer sentiment remained near a historical low, but its accompanying survey showed Americans were more optimistic about inflation easing in the year ahead.

The personal consumption expenditures price index, which measures how much consumers are paying for goods and services, rose 0.1 per cent in November, the commerce department said, taking the annual rate of increase to 5.5 per cent. October's monthly and annual increases were revised slightly higher, though.

The so-called core PCE index, which strips out volatile food and energy costs and is the Federal Reserve's preferred inflation metric, rose 0.2 per cent in November, down from an upwardly revised 0.3 per cent in October.

The annual rate moderated to 4.7 per cent from 5 per cent in October, but that remains well above the 2 per cent level for which the Fed aims.

Although those data suggest price pressures are not declining fast enough to make the Fed soon pause its rate rising cycle, there were some signs that Americans are becoming more optimistic about the inflation outlook.

The University of Michigan's survey showed that consumers — the main driver of US economic growth — in December expected inflation to be at 4.4 per cent in a year's time, lower than the 4.6 per cent they indicated in a preliminary report earlier this month.

Elsewhere, new orders for so-called durable goods tumbled 2.1 per cent in November from a month earlier, which was more than economists expected, but largely due to a drop in commercial jet orders.

> There were signs that Americans are more optimistic about the inflation outlook

However, new orders for non-defence capital goods excluding aircraft — considered a proxy for business investment — rose 0.2 per cent in November to $75.2bn.

Yesterday's releases come at the end of a week in which investors have been scrambling to make sense of data that showed the US economy grew faster than expected in the third quarter and the implications that might have on the future pace and trajectory of monetary policy.

The S&P 500 was up 0.3 per cent at midday yesterday following the release of the latest economic data.

See FT Big Read

Europe. Cultural embrace

Ukraine and Poland forge ties during war

Historical differences set aside for a common cause with the hope that the goodwill can last

RAPHAEL MINDER AND BARBARA ERLING — WARSAW

Journalist Anna Budyńska was among the grassroots army of Polish volunteers who rushed to help Ukrainian refugees as they began crossing the border in February to escape Russia's invasion of their country.

At first, she and her partner donated money and collected food and blankets for refugees arriving in Warsaw. But she wanted to do more to understand those whom she was helping and decided to learn Ukrainian.

"I suddenly realised that I had always loved to travel to western Europe, India or Mexico, but I had never visited Ukraine, knew nothing about Ukrainian culture and only a little bit about its history that was taught at school," she said.

Polish historian Maciej Franz said 2022 would be remembered as "a special year of integration" between "two nations that were isolated from each other by politics half a century ago, and even earlier by hatred and hostility, which was the result of the nationalism that raged between the mid-19th and 20th centuries".

He said his country was helping Ukraine "because we know what it's like to be under [Russian] occupation and how terrible it can be".

About 1.3mn Ukrainians lived in Poland before Russia's full-scale invasion in February, and the number has more than doubled since then.

Their presence has given Poles a new sense of kinship with and respect for their neighbours. Arguments over dark chapters in their history, notably the 1940s massacres of Poles by Ukrainians in Volhynia and other Nazi-occupied regions, have been replaced in Warsaw by public tributes to Ukrainians for fighting Russia.

"We share a distinct fatalism and the same history of Russian imperialism, so many Polish people feel that the same kind of Russian aggression could once more await us," said sociologist Karolina Wigura.

New friends: visitors to the Sunflower Solidarity Centre, which is hosted by the Museum of Modern Art in Warsaw Maciek Jazwiecki/FT

Poland's focus has also started to shift from the practicalities of housing Ukrainian refugees towards longer-term integration. The Museum of Modern Art in Warsaw now hosts the Sunflower Solidarity Centre, which organises workshops, cooking classes and weekly lectures on "decolonising" from Russia. Most of the speakers are Ukrainians and some are recent refugees.

While many Ukrainian refugees were given access to free Polish language classes, their language is now widely featured on billboards and used on Polish television, where retailers such as Lidl air Christmas ads with Ukrainian subtitles. Warsaw cinemas run films with Ukrainian subtitles, while Polish companies have designed Ukrainian-language versions of their apps.

This cultural embrace has come as a shock to some Poles, who once looked down on Ukrainians, particularly after Poland leapt ahead of its neighbour economically after joining the EU in 2004.

Since February, Poland's military and political support has been unwavering, even after Poland and Nato attributed an accidental missile strike that killed two Polish farm workers last month to the Ukrainian army. Polish prime minister Mateusz Morawiecki later said "it is in our best interest to help Ukraine" before making another visit to Kyiv.

But the financing of this support has dwindled, with ordinary Poles struggling with 25-year-high inflation that has reduced their donations and increased refugee fatigue. The Polish authorities recently removed many subsidies given to Ukrainians.

As the war drags on, more Ukrainians and their businesses are embedding themselves into the host country. Despite the goodwill between Warsaw and Kyiv, it is not clear whether Poland will lead Ukraine's postwar reconstruction.

Some Polish executives draw a line between supporting Ukraine's war and wanting to do business again quickly in a country where they struggled, despite initial optimism after Ukraine's 2004 Orange revolution, when protests forced the repeat of a rigged election.

Polish private equity firm Abris Capital Partners opened an office in Kyiv in 2006, the same year as its Warsaw launch. It invested in Ukrainian retail and financial services but eventually withdrew to focus instead on Romania.

"After the Orange revolution, many companies rushed into Ukraine hoping it would become the next Poland, but inflation, devaluation, the lack of strong institutions and corruption forced many of us to back off," Abris partner Monika Nachyla said. "I'm sure there will be some willing to take an aggressive investment approach [postwar] but that probably won't be our path."

Even so, the countries will in any case need to consolidate the newfound solidarity forged by Russia's invasion.

"There's no such thing as a solid and forever good relationship between nations," said Wigura, who highlighted the recent Polish demand for €1.3tn in reparations for wartime losses inflicted by the Nazis. "But at least we can say that in terms of a grassroots reconciliation, we're now in a very good place."

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US politics

Republican control of House to increase Ukraine aid scrutiny

FELICIA SCHWARTZ AND JAMES POLITI — WASHINGTON

President Volodymyr Zelenskyy's visit to Washington this week elicited a burst of bipartisan admiration in Congress, including from many rank-and-file Republicans and party leaders who cheered his speech and vowed to keep helping Ukraine.

But scrutiny on US support for Ukraine is set to intensify as Republicans take the reins of the House of Representatives in January. Part of their scepticism comes from traditional conservative concerns about government waste and excessive spending.

It is also being driven by the isolationist faction of the party closely tied to former president Donald Trump, which has continued to sneer at helping Kyiv even as Zelenskyy toured Washington.

"They're utterly justified in saying, 'we want to understand where aid to Ukraine comes in the big picture of American strategy and spending priorities'," said Kori Schake, director of foreign and defence policy at the American Enterprise Institute. "I ardently hope that oversight in a Republican-controlled House does not descend into performative grandstanding."

Some hard-right lawmakers such as Marjorie Taylor Greene of Georgia did not attend Zelenskyy's address. Others, such as Matt Gaetz of Florida and Lauren Boebert of Colorado, attended but often did not join their colleagues' applause at the Ukrainian president's emotional appeals.

At times, the attacks on Zelenskyy from the right were venomous. Tucker Carlson, the conservative Fox News host, mocked his olive green military attire, saying he looked like the "manager of a strip club". Donald Trump Jr, the former president's son, attacked him for being "basically an ungrateful international welfare queen".

But many other Republicans, even some who have been close to Trump, are not embracing those views. "They are not asking for American soldiers to do the fighting, they are asking for weapons and economic assistance so they can stay in the fight," Lindsey Graham, the Republican senator from South Carolina, said in a tweet. "Ukraine's victory is our victory. God bless Ukraine!"

When they take over the House next year, Republican leaders are planning more hearings featuring Biden administration officials to provide details about where and how aid is being spent and have vowed to apply more scrutiny for future requests.

"There's concern that the money's going to the places that it's intended. Having any taxpayer dollars that go anywhere, whether it's domestically or abroad, deserves scrutiny," House minority whip Steve Scalise said after Zelenskyy's visit, adding he had raised the issue with the Ukrainian leader. "We expressed an interest in making sure the money is going to be scrutinised."

Allies: Lauren Boebert and Matt Gaetz attend Volodymyr Zelenskyy's speech

Zelenskyy acknowledged their concerns, and repeatedly thanked Congress and the American people and promised Kyiv was putting the aid to good use.

"Your money is not charity. It's an investment in the global security and democracy that we handle in the most responsible way," he said during an address to both chambers.

Biden administration officials dispute the notion that Ukraine has received "a blank cheque", as Republican House leader Kevin McCarthy suggested. They said aid packages had been crafted in consultation with both parties, including the legislation delivering $45bn in new aid for Ukraine that is expected to be approved this week. Some of the funds approved by Congress and signed into law by President Joe Biden do not go directly to Ukraine but are for supporting the US response to Russia's war, such as for neighbouring troops, food aid or replenishing weapons stockpiles.

The Republican scepticism comes as both parties are beginning to gear up for the 2024 presidential election and support is waning among some Republican voters for Ukraine assistance.

INTERNATIONAL

Bethlehem sees tourism rebirth in Christmas boost for city

Business owners breathe sigh of relief after two years of pandemic disruption

JAMES SHOTTER — BETHLEHEM

Jack Giacaman is once again looking forward to Christmas. Two pandemic-blighted festive seasons without foreign visitors have taken a heavy toll on his business selling religious gifts in the heart of Bethlehem. But this year, the tourists are returning.

"I'm optimistic," Giacaman said from his premises on a small street behind the Church of the Nativity, revered by Christians as the birthplace of Jesus. "Christmas is a new hope."

His sentiments are echoed across the city in the occupied West Bank. Roughly half of Bethlehem's income comes from the pilgrims and tourists who are drawn to its religious sites. And Christmas, when thousands flock to mass in Manger Square and converge on the other sites that play a part in Jesus's story, is when Bethlehem comes alive.

> 'We're full for Christmas week and January looks promising. We're finally back on track'

Local business owners estimate that after two years during which lockdowns and airport closures left Bethlehem's religious sites almost deserted, tourism is back at about 70 per cent of levels before the pandemic.

Thousands attended the recent lighting of the Christmas tree in Manger Square and the Israeli tourist ministry expects 120,000 Christian visitors will arrive in the Holy Land over the Christmas period, although still some way down on the 150,000 who visited in 2019.

But despite the upturn, the past two years have left deep scars. Like other cities in the West Bank, which has seen an upsurge in violence this year, Bethlehem's residents are used to turbulence, and the vicissitudes of Israel's half-century-long occupation. But the speed with which the pandemic stopped business was unlike anything in recent memory.

"I've been in tourism for 25 years and this was the worst period ever. Worse than the *intifadas*, worse than the Gulf war, worse than everything," said George Kukeyan, general manager of the Ambassador City Hotel.

"The smaller businesses were really hurt . . . I know people who had to sell their land, their jewellery. You have to put food on the table. And you can't eat land, you can't eat jewellery."

The Ambassador was forced to take drastic measures to cope with the crisis, cutting its staff from 48 to just eight. Now, as the tourists begin to return, it has started hiring again, but its current staff numbers of about 30 are still well short of pre-pandemic levels.

The pattern has been repeated across the city. Some businesses have shied from rehiring people because their revenues are still uncertain.

Others have been unable to find staff, as many workers abandoned the tourism sector as the pandemic dragged on.

Holy Land: a nativity scene in Manger Square. Below, a gift shop outside the Church of the Nativity
Mahmoud Illean/AP

While some found jobs online or in different sectors, others found better-paying positions in Israel or the Israeli settlements that surround the city.

"We're facing a shortage of workers because we've lost ours to the Israeli market," said Giacaman.

"A lot of small businesses that used to help me when I got big orders, the owners of these businesses went to work in construction. They sold their tools, they sold everything. I don't think they'll come back."

A few doors down from Giacaman, Rony Tabash, the third generation to work in his family's souvenir shop, which traces its history from 1927, has seen similar trends. "Many people left tourism because they don't trust it any more. They want a stable job," he said. "We're getting back to normal but we bled too much."

Locals say the pandemic has also left its mark on tourists' spending patterns. "They've come back, but people don't really have money," said William Ghattes, a worker at the Church of the Nativity, as he watched a tour group filter out of the basilica. "People have more difficulties."

Bethlehem's own residents have also become wary about costs. Jamal Qarra, who runs a restaurant on Manger Street, said business had been so bad he was forced to cut staff numbers from more than a dozen before the pandemic to just a couple. While a big part of the decline was the absence of foreign tourists, local diners were also being more careful with their money. "I have one client who used to come three times a week; during the day with his friends and in the evening with his wife. Now he comes once a month," he said. "It will never go back to how it was before."

Others are less pessimistic. Giacaman said it would take five years for his business to get back to normal, mainly because it would take time to pay back the loans he took out during the pandemic to cover staff wages. But he said Christmas "gives us power to keep going".

Kukeyan expects a quicker rebound. "We're full for Christmas week and January looks promising," he said.

"It'll take time to get over what we experienced in those 15 or 16 months, but finally we're on track."

See The FT View

INTERNATIONAL

January 6 attack

Trump 'central cause' of assault on Capitol

Then president incited mob to breach Congress building, concludes report

JAMES POLITI AND AIME WILLIAMS
WASHINGTON

A US congressional panel has concluded that Donald Trump was the "central cause" of last year's attack on the US Capitol, in a final report that laid out detailed evidence and offered the most damning assessment yet of the former president's efforts to overturn the results of the 2020 election.

The 845-page document released late on Thursday followed an inquiry that lasted for months, triggering anger and contempt among Trump's allies as it dug into his role in fomenting the mob that stormed the US Capitol building on January 6 2021, threatening the peaceful transfer of power.

"In the committee's hearings, we presented evidence of what ultimately became a multi-part plan to overturn the 2020 presidential election," the bipartisan panel, led by Democratic House member Bennie Thompson and vice-chair Liz Cheney, the Wyoming Republican, wrote in the report.

"That evidence has led to an overriding and straightforward conclusion: the central cause of January 6 was one man, former president Donald Trump, whom many others followed. None of the events of January 6 would have happened without him."

The report said Trump and some close allies made multiple efforts in the weeks after he lost the election to Joe Biden to "corruptly obstruct, impede or influence the counting of electoral votes on January 6, and thereby overturn the lawful results of the election".

Trump publicly refused to accept defeat even though some said he seemed to understand he had lost, the report said. His efforts were mainly focused on getting Mike Pence, his vice-president, "to assert and exercise unprecedented and lawless powers to unilaterally alter the actual election outcome", it added.

Trump "summoned" a mob, "including armed extremists and conspiracy theorists", to Washington on January 6 and later "incited" them to breach the Capitol, the report pointed out.

The rioters did not stop until Trump asked them to stand down hours later — "but not before the Capitol was invaded, the election count was halted, faeces were smeared in the Capitol, the vice-president and his family and many others were put in danger, and more than 140 law enforcement officers were attacked and seriously injured by mob rioters", the report said.

"Even if it were true that President Trump genuinely believed the election was stolen, this is no defence," the committee's report went on to point out.

More than 900 people had already been charged by the justice department in connection with January 6, the committee noted. Of those, almost 500 protesters have been convicted or pleaded guilty.

The committee's final report comes as Trump faces a fresh torrent of criticism and scrutiny after launching a new bid for the White House in the 2024 presidential election.

As well as the criminal referrals from the January 6 congressional probe, unprecedented for a former president, a separate tax-writing committee this week voted to release Trump's tax records between 2015 and 2020.

Coronavirus outbreak. Bottlenecks

China's Covid exit wave overwhelms hospitals

Emergency rooms are full, oxygen is in short supply and sick doctors cannot work

RYAN MCMORROW AND NIAN LIU — BEIJING
ELEANOR OLCOTT — TOKYO

Hospitals in Beijing are being overwhelmed by sick elderly Covid-19 patients just weeks after China abandoned its tough coronavirus containment measures with little preparation for the exit wave now ripping through the country.

Chinese officials estimate about 250mn people or 18 per cent of the population were infected with Covid-19 in the first 20 days of December, as Beijing abruptly dismantled restrictions that had contained the disease for almost three years.

The estimates — which include 37mn people who were infected on Tuesday alone, or 2.6 per cent of the population — were revealed by Sun Yang, a deputy director of the Chinese Center for Disease Control and Prevention in a Wednesday health briefing, according to two people familiar with the matter.

Emergency rooms have run out of portable beds for patients, the infirm are waiting hours for ambulances and many doctors are too sick with Covid to work. Some facilities are so overloaded they are running out of oxygen hookups for those with respiratory problems.

Beijing's healthcare system was long thought to be among the best prepared in the country to deal with a surge of Covid infections. But the central government's decision this month to abruptly abandon its draconian zero-Covid policy, which had held off the disease for nearly three years through mass testing and quarantines, has sparked one of the country's biggest coronavirus outbreaks.

The influx has created a bottleneck in the capital's emergency rooms in particular, according to conversations with a dozen medical professionals at five central Beijing ERs, who either declined to give their names or asked not to be named. "All the doctors are laid up, we don't have anywhere to send patients because other departments don't have enough doctors," said a neurologist on duty at the Beijing Friendship Hospital.

Unloaded: a patient arrives at a Beijing Covid clinic on Wednesday, as the capital's hospitals struggle to treat an influx of sick people
Kevin Frayer/Getty Images

Overcrowded emergency rooms are leaving ambulance crews with nowhere to put the many bedridden patients they bring in, delaying rescue vehicles at hospitals and leaving families needing help at home waiting for hours.

"The problem is we can't leave, we have a big backlog of people waiting on us but we are forced to wait here because there are no beds, the elderly can't get off our stretcher, we can't just throw them on the ground," said one medic outside Chaoyang Hospital's ER.

Inside the ER, a 90-year-old woman with Covid who the ambulance team had brought in was lying on the van's stretcher, an intravenous drip into her arm. "We waited three hours for an ambulance, other hospitals wouldn't take us at all," her son said, declining to give his name.

Six hours later the ambulance's stretcher had been squeezed between portable beds and the woman hooked up to oxygen. A doctor in the hospital's intensive care unit said it was also full.

Doctors at Chaoyang Hospital and Beijing Friendship Hospital said they were transferring patients to overflow wards at Beijing Chaoyang Integrative Medicine, a specially built emergency facility. By Tuesday, it was also nearing capacity.

> 'The elderly can't get off our stretcher, we can't just throw them on the ground'

"We have doctors but we have no beds," said a nurse at the hospital. An adjacent "emergency observation room" had been turned into a makeshift morgue. Financial Times reporters saw six bodies inside on Tuesday.

China has officially reported an increase in Covid deaths of only six since December 3. Most analysts believe the real number is probably significantly higher as coronavirus infects tens of millions of people for the first time. China's top health officials on Tuesday said they had changed how they count Covid deaths, excluding large numbers of coronavirus-related mortalities.

Ben Cowling, a professor of epidemiology at the University of Hong Kong, estimated that it had taken the Chinese capital, with a population of 22mn, about two weeks from loosening Covid controls to reach its infection peak.

"The latest omicron variants are so transmissible and because of the lack of mitigation measures as well, it's really spread faster than anything that we've ever seen before," he said, noting little appeared to have been done to slow the spread and flatten the curve. "Even spreading cases out over a week or two could make a difference, because you just have more time to deal with things and when all the severe cases arrive at the same time, that's the worst possible scenario."

That is the situation unfolding in Beijing. "We couldn't find a hospital bed. The wards were completely overwhelmed and short-staffed," said the relative of a man in his 80s who died at home in Beijing over the weekend. He said doctors had advised the grandfather against vaccination because of his underlying health conditions.

The city has done a better job of keeping coronavirus out of its nursing homes, which from mid-September were ordered to keep their doors shut.

"We haven't had any cases because we basically have no contact with the outside world," shouted the manager of Zhaohe Elderly Care in south-east Beijing from behind a gate.

Chaoyang Hospital and Beijing Friendship Hospital referred questions to the Beijing Health Commission, which did not respond to a request for comment.

Price pressures

Japan's core inflation at 41-year high after yen's fall against dollar

KANA INAGAKI — TOKYO

Japan's core inflation rose at its fastest pace in nearly 41 years in November, in data that may embolden investors looking to challenge central bank claims that it does not plan to increase interest rates.

Although still mild compared with the US and Europe, inflation in Asia's most advanced economy gained pace on the back of a historic fall in the yen against the dollar and price rises in food and electricity bills.

Official statistics released yesterday showed that the core consumer price index, which does not include volatile fresh food prices, rose 3.7 per cent in November from a year earlier, exceeding the Bank of Japan's 2 per cent target for the eighth consecutive month.

The rise was in line with market expectations as a wide range of companies increased prices of food and beverages from October including potato chips, cereal, beer and fried chicken.

Earlier this week, the BoJ maintained its forecast that inflation was likely to slow down by the second half of next year and stressed that it was not tightening its monetary policy as it tweaked the way it keeps a lid on long-term borrowing costs.

Kiichi Murashima, economist at Citigroup, echoed the BoJ's outlook, estimating that core inflation was likely to slow sharply once government curbs on gas and electricity charges took effect.

While core CPI was expected to rise 4.3 per cent in January, it was expected to slow to the 1 per cent range from August, according to the brokerage.

"Demand-driven price pressure remains preciously scarce. While further policy tweaks by the Bank of Japan are a possibility — especially under a new governor next year — it's hard to see a fundamental shift," said Sarah Tan, economist at Moody's Analytics.

Prime Minister Fumio Kishida's cabinet also approved yesterday a record budget totalling ¥114.4tn ($862bn) for the fiscal year from April as Japan significantly increased its defence spending to counter China's military rise.

As part of a five-year plan to expand its military capabilities, the government will increase its defence spending by 26 per cent from a year earlier to ¥6.82tn in fiscal 2023.

The spending plan includes ¥211.3bn to buy Tomahawk cruise missiles from the US, ¥250bn to buy 16 of Lockheed Martin's F-35 stealth fighters and ¥105bn for a new fighter jet programme with the UK and Italy.

The sharp increase in military spending, combined with a steady rise in social security costs to support a rapidly ageing society, has sparked an intense debate over how Japan is going to finance the budget with the country's public debt already at more than 200 per cent of gross domestic product.

The government will issue construction bonds to fund part of the increase in military spending. Kishida has also said it will consider other options such as increasing corporate taxes, levies on cigarettes and extending a special income tax programme that has been used to fund reconstruction of the Tohoku region following the 2011 earthquake.

Unsustainable debt

World Bank chief economist calls for overhaul to bailouts

JONATHAN WHEATLEY — LONDON

The World Bank's chief economist has called for an urgent overhaul of the system for dealing with unsustainable debt, as the institution warns of a wave of sovereign defaults by developing countries.

A surge in global borrowing costs, along with the strong dollar and high inflation, have made it hard for some countries to meet repayments on foreign and local currency debts.

Indermit Gill, chief economist, said the framework for dealing with unsustainable debt burdens was no longer fit for purpose and "needs to change".

"We are applying a restructuring model that was devised for another time," Gill said. The system was "too little, too late" for countries in danger of default and "too lopsided" in favour of commercial creditors.

The World Bank has warned that countries are struggling under soaring debt costs and the strains on public finances caused by the coronavirus pandemic and Russia's war in Ukraine.

Poor global growth makes it even more urgent to tackle the issue now, he said. "Our best forecast for next year is a third lower than it was a few months ago," he said, adding that debt restructurings "could be a train wreck".

Critics say efforts to deal with mounting debts have moved too slowly in cases such as Zambia, Sri Lanka and Ghana, which this week became the latest developing economy to default.

Gill blamed the delays on the lack of a set of globally agreed standards, and said dealing with defaults and restructurings on a case-by-case basis was creating "the same problem five years down the road".

Today's approach to debt workouts was devised during the emerging market debt crises of the late 20th century, when creditors were largely western governments and commercial banks.

Procedures for debt workouts involve the IMF and World Bank conducting a debt sustainability analysis before calculating the amount of debt relief needed to restore sustainability and put the debtor on a path to growth.

Ukraine war

North Korea arming Russia's Wagner mercenaries, says US

FELICIA SCHWARTZ — WASHINGTON

The White House has accused North Korea of arming the Kremlin-linked private military company Wagner Group, which has deployed its mercenaries in Ukraine as part of Russia's invasion of its neighbour.

John Kirby, for the US National Security Council, said the North Korean deliveries, which have included rockets and missiles, began in November but have not had a significant effect on the course of the war. "Because of our sanctions and export controls, Wagner is searching for arms suppliers to support its military operations in Ukraine," he said.

"We can confirm that North Korea has completed an initial arms delivery to Wagner, which paid for that equipment," he added.

Wagner, which is headed by Yevgeny Prigozhin, a longstanding associate of Russia's president, Vladimir Putin, has become an increasingly high-profile part of the Kremlin's offensive.

Prigozhin, often referred to as Putin's "chef" because the two men became close when Prigozhin ran a catering company, has emerged as a leading domestic critic of how the Russian defence ministry has run the war, leading analysts to argue he is attempting to increase his influence over strategy.

The Biden administration has attempted to crack down on the group and on Wednesday said it would face additional export curbs to prevent it from accessing equipment made with US technologies. Wagner was previously added to a US trade blacklist in 2017.

Kirby said the US would impose additional sanctions against the group soon.

In September, declassified US intelligence claimed the Kremlin was purchasing "millions of rockets and artillery shells" from North Korea as western sanctions began to choke Moscow's normal supplies.

Ties between Moscow and Pyongyang have warmed since Russia's invasion of Ukraine in February. North Korea was quick to express its support for the invasion, blaming the war on US "hegemonic policy" and "high-handedness".

Additional reporting by Christian Davies

Shootings

Gunman kills three in attack near Paris Kurdish centre

SARAH WHITE — PARIS

A gunman killed three people near a Kurdish cultural centre in central Paris yesterday in an attack the country's interior minister alleged was racially motivated.

Unrest broke out following the shooting as protesters spilled out on to nearby streets in Paris's 10th *arrondissement* and clashed with police.

The assailant, a 69-year-old man who was known to police for previous violent attacks, was arrested at the scene on suspicion of murder, manslaughter and aggravated violence. He was taken to hospital after sustaining injuries.

Interior minister Gérald Darmanin said the gunman, a Frenchman, was not known to have been part of any organised far-right movement. It was not clear whether he had deliberately targeted Kurds or foreigners more broadly, Darmanin said. The man, who was a member of a shooting sports club, had previously been arrested for illegally holding a firearm and for a violent assault, prosecutors said.

As protests broke out close to the site of the attack, a crowd threw projectiles at police, who responded with tear gas. Riot officers were deployed as dozens of people marched through the area.

Paris prosecutor Laure Beccuau said the gunman had been released from jail less than a fortnight ago after being arrested and held on provisional detention last December for attacking a migrant camp in the city with a sword.

Two people were wounded in that attack, when the man had slashed at tents, she added. The assailant had also previously been involved in an incident in the city's Seine-Saint-Denis suburb, which is home to a large population of immigrants, she added.

The gunman opened fire at about midday at the Kurdish cultural centre and at a neighbouring Kurdish restaurant and a hair salon, Alexandra Cordebard, mayor of the 10th arrondissement, told reporters. One of those wounded was in a critical condition, Cordebard added. The attack shocked Parisians and left the French capital on alert just two days before Christmas.

FT BIG READ. GLOBAL ECONOMY

Although higher energy prices and a cost of living crisis are biting in many countries, Americans are still spending freely this Christmas season. Are they delaying the inevitable or can a recession be avoided?

By Andrew Edgecliffe-Johnson and Colby Smith

The resilient consumer

The queue for the Fifth Avenue Lego store snaked around the block one lunchtime this week, as New Yorkers and tourists jostled to pluck last-minute Christmas presents from shelves in the shadow of a plastic-brick model of the nearby Rockefeller Center.

The prime Manhattan shopping district is crowded again after two pandemic holiday seasons marked by health fears and supply shortages. At the end of a year in which the US has seen its highest inflation rates for four decades, the resilience of consumer spending has been one of the year's economic surprises.

Despite rising prices for everything from groceries to gasoline, a doubling of mortgage rates and headlines warning of a possible recession in 2023, Americans are still spending freely — and providing a vital underpinning for the economy.

The National Retail Federation expects this year's US holiday retail sales to grow by 6-8 per cent over 2021's record-setting $889bn. Some brands are pointing to a stronger season than that, with Nike saying on Wednesday that its North American revenues were up by double digits over Black Friday and Cyber Week.

Also this week, the Conference Board's consumer confidence index reported its highest reading in eight months, buoying US stocks as investors asked whether it signalled that a recession might yet be dodged.

Such buoyant consumer demand is harder to find in Europe, where high energy costs and rising interest rates are contributing to a cost of living crisis that is particularly hitting many low-income households. Eurostat said this month that retail sales fell 1.8 per cent in October. However, many economists think the downturn in the European economy will be shallower than had initially been expected when Russia invaded Ukraine.

For policymakers in the US, the European experience raises the question of how long America's shoppers can continue to defy the pessimists' expectations. Is the strong Christmas spending simply delaying an inevitable slump?

Beyond the bustle in the top brands' flagships, there are already signs that US shoppers are becoming more cautious and several of the factors that have kept them spending are starting to fall away.

The appetite for $850 Millennium Falcon Lego sets or the sequinned jumpsuits featured in the windows of Saks Fifth Avenue matters not just to the retailers on opposite sides of New York's main shopping drag. There are few economic indicators that the Federal Reserve keeps a keener eye on than the health of the US consumer.

"It would be hard to watch anything much more closely than we watch consumer spending," Jay Powell, the chair of the US central bank, told a press conference in June.

The Fed is watching

At a time when the central bank is actively trying to cool the economy in order to bring decades-high inflation under control, damping demand for various goods and services by rapidly lifting borrowing costs is central to its efforts.

Since March, the Fed has raised its benchmark policy rate from near zero to just under 4.5 per cent and it has signalled its intentions to take further action next year. Most officials now project that the federal funds rate will top out between 5 per cent and 5.25 per cent. Many, including Powell, have warned that they may need to go further should inflation prove more stubborn than they expect.

Shoppers on Fifth Avenue, New York's main retail district. There are few economic indicators that the Federal Reserve keeps a keener eye on than the health of the US consumer
Julia Nikhinson/AP

Monetary policy adjustments take time to filter through the economy and start to change consumer behaviour, however. So far, the higher cost of borrowing has only marginally dented spending — reflecting a resilience that Mary Daly, president of the San Francisco Fed, said last week was "surprising".

"People underestimated the resolve and the ability of the US consumer to spend throughout 2022," says Michelle Meyer, chief US economist at the Mastercard Economics Institute. "That speaks to the sources of purchasing power that the consumer has enjoyed throughout 2022 and will continue to rely on in 2023."

'People under-estimated the resolve and ability of the US consumer to spend throughout 2022'

Americans have been flush with job opportunities for most of this year as companies tried to overcome crippling worker shortages, particularly in service sectors such as hospitality and travel. That has pushed up wages, which are more than 6 per cent above their November 2021 level, according to the Atlanta Fed. The unemployment rate remains close to its pre-pandemic lows, at 3.7 per cent.

A big boost to US households' purchasing power, though, has been the $2.2tn in "excess" savings they amassed thanks to historic fiscal stimulus packages passed by Congress to blunt the economic damage of the Covid-19 crisis.

Economists at Citigroup reckon that Americans have spent about $700bn of that sum. Many have also started to take on more borrowings: credit card debt, which plunged early in the pandemic as people with fewer options to spend paid down their balances, is approaching pre-Covid levels. Even so, consumer debt levels as a share of disposable national income are still below 2019's average.

"Households are entering 2023 with balance sheets at least as strong as pre-pandemic and by some metrics with more room to take on more debt," Citi's analysts wrote in a recent research note. "That should help support spending in the first half of 2023, even if real wage growth remains negative and job growth slows further."

That is not what every retailer is banking on, however. Two blocks up Fifth Avenue from the Lego store, a Hollister clothing outlet was prominently pitching "holiday sale" bargains including $49 jackets and hoodies for $20. A $350 KitchenAid mixer, marked down by $100, was among the last-minute online bargains at Bed Bath & Beyond, the home goods chain whose sliding sales have left its bonds trading far below par.

"The headwinds of the past year are catching up to consumers and forcing them to be more conservative in their holiday shopping this winter," Ellen Zentner, chief US economist for Morgan Stanley, wrote to clients last week. "While last year consumers rushed to buy gifts early due to low inventories, this year 70 per cent of consumers are waiting for discounts before starting their holiday shopping."

Pent-up demand for meals out, entertainment and travel has shifted spending from goods to services as the pandemic has waned. Expensive purchases such as appliances, furniture and cars have been most affected, but now chains stocking more affordable items are reporting that their customers are chasing deals or trading down.

The Fed's latest "Beige Book" collection of regional reserve banks' anecdotal observations noted that inflation was driving shoppers, particularly those on low incomes, to "lower-priced items and lower-priced stores". Hair salons were giving fewer haircuts, the Kansas City Fed found, even as high-end entertainment venues thrived.

Several consumer-facing companies tell a similar story, with Smith & Wesson complaining at this month's earnings announcement that sales had been hit by consumers opting for cheaper guns. Church & Dwight has seen people trading down from $100 Waterpik flossers to $50 models, and from premium cat litter to its value brand. Dollar General, the discount chain, noted that more customers were choosing private label items or shopping closer to payday.

'Households are entering 2023 with balance sheets at least as strong as [before the] pandemic and by some metrics with more room to take on more debt'

Managing budgets

Such spending shifts are becoming evident around the world. A recent Mastercard study found that high food inflation was prompting consumers from Brazil to Indonesia to shop more often but spend less on each visit, hoping to avoid waste and manage their budgets.

In the UK, for example, consumers made 37 per cent more trips to grocery stores this September than in September 2019, but spent 10 per cent less per trip. "The reaction of the UK consumer is giving us a bit of a preview of what's to come in 2023 in other regions, such as Australia, Canada and the US," the report concluded.

For economists watching US consumers, the biggest wild card is how significantly the unemployment rate rises. People who feel that their jobs are at risk or that they will be unable to find new work may be less inclined to draw down savings or take on more debt, Meyer notes. She contends that it may not take material job losses and a "collapse" in consumer spending for the Fed to feel able to back off its most aggressive campaign to tighten monetary policy since the 1980s. Rather, it will take a moderation in job growth and a softening of wage pressures, with unemployment rising to 4.7 per cent.

6-8% Forecast rise in holiday retail sales in the US, over 2021 figures

5-5.25% Expected federal funds rate next year, according to Fed officials

That aligns with recent projections from Fed officials, who maintain that the US economy can avoid a recession next year and see the jobless rate peaking at 4.6 per cent as companies favour cutting vacancies rather than pursuing mass lay-offs.

Other economists are less optimistic, however.

James Knightley, chief international economist at ING, observes that chief executives' confidence is at its lowest level since the global financial crisis. "If CEOs are this pessimistic then expect firms to move into cost-cutting [or] retrenchment mode," he warns.

Coupled with a housing market where he thinks prices could fall by 20 per cent over the next 18 months as higher mortgage rates bite, "we have to be braced for a period where consumers are much more careful with their money", Knightley argues. He thinks real consumer spending growth will start falling outright from about March to September next year.

Megan Greene, global chief economist at Kroll and an FT contributing editor, is expecting a recession around the middle of next year as the Fed pushes its policy rate above 5 per cent.

"The narrative that [companies] will just whittle down job openings and the labour market won't deteriorate significantly is a really nice theory that doesn't work so well in practice," she says.

If employers do make deeper cuts, that may leave the Salvation Army bell-ringers, who were collecting donations for families in need on Fifth Avenue this week, entertaining thinner crowds next year. As Greene notes: "Consumers tend to stop spending when they get laid off, their friends get laid off or they hear about lay-offs."

Obituary

Singer who set the stage for multicultural UK charts

Terry Hall
Musician
1959-2022

Terry Hall, performing the hit single "Do Nothing" with his band The Specials on BBC television in 1980, did an ironic eye roll when he sang about "trying to find a future". It was a time of high unemployment, racist violence and recession in the UK. Good luck trying to find a future in all that.

With his long features and laconic manner, like an apprentice undertaker, Hall had a good face for delivering bad news. But what appeared to be a dead-end was actually the opposite. The singer, who has died aged 63, was ushering in a new era for British pop in the early 1980s.

The Specials were one of the key bands of their time. Formed in 1977 in Hall's home town of Coventry, in the English Midlands, they were a racially mixed group of musicians who played Jamaican ska in the style of British punk rockers, or punk in the style of ska.

Hall was co-lead vocalist with Neville Staple. Their contrasting complexions, and those of their bandmates, were reflected in the black-and-white design of the record label that The Specials set up, 2 Tone Records. It played a central role in the ska revival of the early 1980s, a foundation stone towards the multicultural sound of today's UK charts.

Hall grew up in a working-class household, with both parents working in Coventry's car industry. Having left school at 14, he joined a local punk band while supporting himself with casual jobs. He was working in a stamp shop when he was recruited to The Specials by the band's keyboardist and main songwriter, Jerry Dammers. "Philately will get you nowhere," Dammers punned. Suitably flattered, Hall joined up.

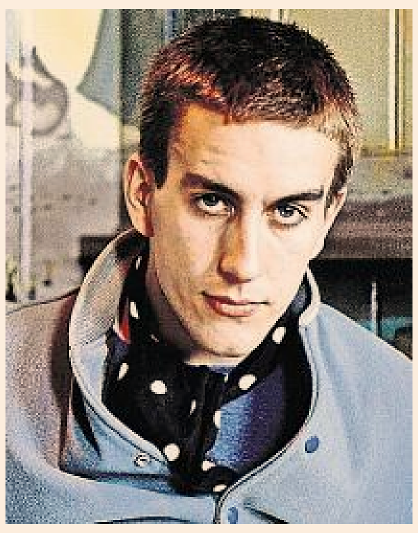
The Specials had a top 10 hit in 1979 with their first single, "Gangsters". Gigs were high-octane affairs, fusing the rebellious energies of reggae, punk and post-punk.

Politics featured prominently, including a leading role in the Rock Against Racism movement against far-right race hatred. Their classic hit "Ghost Town" topped the charts in 1981 as rioting erupted in British cities. Its ghostly fairground ska was the mournful sound of a smouldering nation — even as its mixed musical identity imagined another future.

Hall did not wear his celebrity lightly. "I don't want to be on a big stage with bright lights and kids gawping at me. I'd much prefer them to turn their backs on me and just dance," he said in 1980.

But despite his display of disaffection, or perhaps because of it, he was a magnetic stage performer. "I was obsessed with him," Blur's Damon Albarn would recall later. "I could not imagine anyone cooler."

Due to internal tensions — his relationship with Dammers became particularly fraught — Hall left The Specials in 1981. He and Staple formed Fun Boy Three with another ex-Specials member, Lynval Golding. Their striking new wave pop demonstrated Hall's eclectic ear: their 1982 hit "It Aint What You Do . . ." was an inventive cover of a 1930s jazz standard. Among those paying attention was the Bristol rapper Tricky, who filtered their influence into his groundbreaking music in the 1990s. Another future was being mapped out.



Terry Hall: The Specials were one of the key bands of their time

'I was obsessed with him. I could not imagine anyone cooler'

"A lot of the stuff I've done is pretty much a wind-up," Hall claimed in 1995. His work after Fun Boy Three broke up in 1983 had a restless quality, including collaborations and solo albums.

Styles ranged from classic-pop pastiche in 1990's *Ultra Modern Nursery Rhymes* to worldbeat in 2003's *The Hour of Two Lights*. In 2008, he joined a reunited line-up of The Specials, which led to two new albums.

Survived by his second wife, their son and two sons from a previous marriage, his death follows a brief illness. It brings a sadly premature end to the life of a singer who helped British pop to find its future.

Ludovic Hunter-Tilney

The FT View

FINANCIAL TIMES
'Without fear and without favour'

ft.com/opinion

A search for meaning in secular times

Religious worship may be in decline, but spirituality remains undimmed

This weekend, clergy in England and Wales will experience something unusual: preaching to a full house. In normal times, just 690,000 people attend Church of England services with any regularity, but at Christmas time attendances usually soar to above 2mn.

It is not just at Christmas that British priests play to larger-than-normal congregations. In the year before the pandemic, a third of all funerals in the UK were conducted by Anglican clergy. The UK could no longer be said to be a "Christian country" even by the broadest measure — the number of self-declared Christians fell to 46.2 per cent in the 2021 census, the first time that the number has fallen below 50 per cent. Yet even in many more religious countries, observance increases at Christmas and at a death.

In the US, where a majority of Americans profess to hold the Christian faith, only a third attend church regularly but Christmas is a day of bumper attendances. Nor is that trend confined to Christianity. In Israel, while under a third of Jews attend synagogue weekly, according to one reputable survey more than 60 per cent observe the Yom Kippur fast. Ninety-five per cent of Hindus celebrate Diwali — but just 55 per cent pray daily.

Nor can that pattern be attributed to the importance of those occasions in their respective theological calendars. Globally, nine out of ten Muslims fast for some or all of Ramadan, yet just 63 per cent observe the requirement to pray daily. What unites these occasions is that they are communal: whether in a pew at Christmas or breaking a fast, it is a moment to come together.

In increasingly secular societies, religion has a "free rider" problem: people value a shared set of landmarks and communal institutions, whether in times of celebration, of consolation, or of grief. But these landmarks and institutions cannot be sustained through occasional attendees alone.

The desire for meaning is one reason secular movements are enjoying new prominence. Schools of thought such as humanism seek to provide the same community and meaning that used to flow from religiosity. Effective altruism encourages adherents to practise tithing and provides a moral framework to its members. It remains popular and influential on campuses, despite a bruising year in which one of its most prominent advocates and its first billionaire, Sam Bankman-Fried, has been charged with multiple counts of fraud.

Other new sources of meaning are less benign. Dangerous conspiracies such as the QAnon movement provide a sense of community and of purpose but at the expense of democratic values. As activist causes become not just movements for change but also sources of identity, they can, paradoxically, become less effective. Campaigns for equality or to combat climate change risk becoming narrow sects, not broad coalitions uniting around a cause.

As activist causes become not just movements for change but also sources of identity they can, paradoxically, become less effective

Religion itself has become more intolerant after the hollowing out of what the historian David Hollinger describes as its liberal "ecumenical" heritage. Religious traditions practising tolerance are being supplanted by secularism or by more intolerant strains. One example is in India: while the proportion of practising Hindus has declined only moderately since independence, by 4 per cent, Hindu nationalism has become more potent. Nearly two-thirds of Hindus say one must be Hindu to be "truly" Indian.

Whether through religion or spirituality, the search for purpose means that people will find meaning and direction through one framework or another. The test for civic society is to help ensure that search facilitates tolerance and common purpose, not conspiracism and division.

Letters of the Year 2022

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Putting loss centre stage makes 'Sex and the City' relevant

In "A #wokemoment won't make you more relevant" (Opinion, Life & Arts, February 12), Jo Ellison expresses her disappointment — for a second time in her exceptional weekly column — with the *Sex and the City* reboot. Not funny, she writes, too woke and a "relentless campaign to seem more relevant".

But what can be more relevant than the portrayal of a sudden, unexpected death? The show's depiction of loss and its aftermath rang deeply true for this mid-50s widow. I am not a New Yorker with a closet full of designer clothes, but a business executive raising two teenagers in suburban Virginia.

Still, the experiences were mine — ugly funeral homes, awkward conversations, filling some of the hole by meeting new friends, a loss of tolerance for the pettier parts of life, playing the dead husband card and opening to the mystery of life.

The show may have got many things wrong, but loss, in all of its dimensions, it got right. Couldn't we all use a common, yet light-hearted viewing experience telling a story with death at its centre? We rarely personalise this inevitable part of life, despite the last two years of the pandemic and millions of people gone. This show starts that conversation.

Becoming a widow is a reflection of the human condition — even when dressed in Jimmy Choos and Alexander McQueen. Portraying it allows us to talk about the really hard parts of life, but also the path to the other side, a path made better with good friends — no matter if they are not named Carrie, Samantha, Charlotte or Miranda.

Sue Deagle
Great Falls, VA, US
February 19

It's gratifying to be in the know as a 91-year-old

Thanks to Jo Ellison's entertaining article "The beautiful banality of BeReal" (Life & Arts, September 24), I am now an authority on the social media platform BeReal. At a recent party of pre-millennials it was gratifying to find I was about the only guest who knew about it. It would have been better still if I could have boasted of my successful experiences, but at 91 I have too many other things to do.

Pat Story
Cambridge, UK
October 8

EU media plurality rules can put manners on Musk

The repercussions of Elon Musk's brand of "free speech absolutism" for Twitter have of late received much comment ("Musk, Twitter and the need to vet new media owners", FT View, April 29).

The EU's commissioner for the internal market, Thierry Breton, went so far as to remind Musk of his need to comply with EU rules, a reference to the recently adopted Digital Services Act. But the DSA will probably not take effect until at least 2024.

In the meantime, Musk's acquisition will almost certainly get a smooth ride through the competition authorities (including the European Commission), since he has no other business interests that compete with Twitter.

But one important possibility, which could result in protections being put in place now, has so far been overlooked. EU member states can intervene in EU merger control proceedings to protect certain important "legitimate interests" (under Article 21(4) of the EU's merger regulation). These include "plurality of the media".

Twitter has over 45mn users in the EU, many of whom use the service as their principal news source, making it an important part of the media plurality ecosystem.

Article 21(4) — so far rarely used in a media context — could provide a unique opportunity to scrutinise Musk's plans for Twitter in advance, rather than wait for the DSA to take effect.

Craig Pouncey
Tervuren, Belgium
May 7

Recalling Putin's Syria disinformation campaign

After far too many years of neglect of this vital topic, I was heartened to see the prominence given to the piece by Bellingcat's founder, Eliot Higgins "Don't let Putin's disinformation distract from his war crimes" (Opinion, FT Weekend, March 19).

Higgins highlights Vladimir Putin's total mastery of the art of disinformation and how the world allowed him free rein in Syria to hone the skills already learnt from his decades in the KGB.

Like Higgins, I watched helplessly from the sidelines, both inside and outside Syria, as Putin took charge of the Syrian disinformation war.

His crowning moment came after Russian forces took Palmyra from Isis in May 2016. A special orchestra led by the Kremlin's favourite conductor was flown in from Moscow to Damascus.

The musicians were hastily bussed across the desert for a brief "victory concert", and Putin appeared by video link on the stage of Palmyra's ancient theatre, projecting himself as the "saviour of Syria".

It worked. He re-entered the world stage as a global player.

Diana Darke
Author of 'My House in Damascus'
London SW15, UK
March 26

Imagine China welcoming Pelosi, with no loss of face

I realise that in an age of drone attacks and long-range missile technology, geopolitical subtlety has gone by the wayside.

However, I can only wonder what would have happened if the Chinese government's reaction to US House Speaker Nancy Pelosi's visit to Taiwan had been to issue a statement along the lines of "Welcome to China, Mrs Pelosi. We hope you enjoy your visit".

It would have both made its point and regained the initiative without generating all this conflict and spending all this money on military exercises and assorted brouhaha (Big Read, FT Weekend, August 6).

David Wilbur
Doylestown, PA, US
August 13

Volleyball, champagne and a slice of gingerbread

Victor Mallet's article on how French vineyards are responding to the challenge of climate change reminded me of my own time working for Yves Couvreur's father as a 17-year-old schoolboy in 1957.

I had been dispatched to Reims to "work" in the cellars of the champagne house GH Mumm for the summer.

I was lodged in a *pension* and bicycled to work every day where I might be given some menial task, hide in a dark corner to catch up on sleep or occasionally share a bottle of the finest champagne with the *ouvriers* who knew exactly how to circumvent the security system.

However, the highlight of my stay was my weekly Sunday lunch invitation to the Couvreur home in Ville-Dommange.

I would be collected from the bus stop by a family member and taken to the château. Plucked from my *pension* existence I sat at an enormous dining table with a dozen or more very voluble French men and women of all ages, which challenged my schoolboy French. A glass or two of wine, as champagne was referred to, made matters easier.

After lunch, volleyball on the lawn. Then tea on a large table where there were slices of fresh gingerbread covered with a generous layer of butter all washed down with, yes, champagne.

I owe the Couvreur family an immense debt of gratitude for my love of all things French which has played a dominant part in my whole life.

Ian Swan
Director, Lebron, Atlanta, GA, US
September 3

Sartorial perfection

With regard to Annachiara Biondi's "My search for the perfect suit" (Style, October 22), she can stop looking. The perfect suit is from Issey Miyake Pleats Please. It never goes out of style, goes easily from office to dinner, and nothing is easier to pack.

Doris Straus
New York, NY, US
October 29

Vladimir Putin in 2016 appeared by video link on stage at Palmyra's ancient theatre, projecting himself as 'The Saviour of Syria' — Vasily Maximov/AFP/Getty Images

Speaking too soon on an ancestral train journey

Trains can also be a means of retracing ancestral journeys ("My trans-Europe train trip", Opinion, May 14).

Captured outside Dunkirk in May 1940, my father spent five years in three prisoner of war camps in southern Germany — in Laufen, Warberg and Eichstätt.

Last September after lockdown, I visited all three. I journeyed on the same train tracks, arrived at the same stations, walked on the same roads to each camp. Travel took a morning not three days; the guards were friendly, not armed; nor did I have to sleep in a luggage rack. But 80 years later, trains connected us both.

Taxi drivers became as involved as I was. One wept as I described my father surviving friendly fire in April 1945. Another stood with me in a PoW cemetery and said: "Now. No war. *Das ist gut*." Sadly, he spoke too soon.

Chris Grace
Cwm Mwynant, Pembrokeshire, UK
May 28

I suspect this bit of Belfast brogue will never catch on

I smiled when I read Danny Leigh's review of Kenneth Branagh's movie *Belfast* and his (correct) reference to how we locals, like Judi Dench's character, call films "fill-ums" (Life & Arts, FT Weekend, January 22).

Seeing it written that way, however, made me think how movies do just that — fill time, fill a gap, fill audiences with emotions that transport them from their everyday lives.

So I wondered whether "fill-um" might be our own way of expressing a deeper understanding of the cinematic experience. Then I realised that was the "buck eejit" in me talking and I needed to have some sense or, in local parlance, "catch myself on".

Because I suspect "fill-um", as a pronunciation, never will.

Caroline Eagles
Rostrevor, County Down, UK
January 29

Trump embodies the Rotten vision of anarchy

Christopher Grimes (Spectrum, August 20) expresses feelings of nostalgia and disillusionment about the (American) football hero of his childhood, who turned into an unconditional Donald Trump ally in the state of Georgia.

Grimes captured well the feelings I had about John Lydon, aka Johnny Rotten, the British punk musician — one of my own childhood heroes — expressing his enthusiastic and loyal support for America's former president. Upon reflection, this is a predictable, perhaps even logical outcome of the original vision behind the Sex Pistols.

Trying to create the "anarchy in the UK" by selling records proved over-optimistic. Promoting "anarchy for the USA" by electing a president is just the continuation of the same strategy with different, and much more effective means. As Lydon shouted in his Good Morning Britain broadcast during the most recent presidential elections: "He is the only hope."

Alessandro Lomi
Montagnola, Ticino, Switzerland
September 17

Predictive text really gets its knickers in a twist

I read with interest the article in Life & Arts on how the Uniqlo brand is starting a repair and mending service as part of its sustainability plans (September 17). This is commendable but will the technology be able to cope?

During lockdown, I emailed my cousin to say I was "darning my vest" and I could feel our fierce grandmother looking over my shoulder. Only to discover my phone's predictive text had changed the email to "earning my best". By the time my cousin and I had finished educating Mr Predictive on underwear if we keyed in "liberty" he hastened to add "bodice" — what we will all probably be wearing this winter.

Jane Swan
Delabole, Cornwall, UK
September 24

Will cryptos be as reliable as Adam Smith's butcher?

When a currency's survival (Big Read, May 14) depends on promises of doing "whatever it costs" to defend its dollar peg, you'd expect the person doing the promising to be a high-ranking official from government or the central bank — and not a chief technology officer of an 8-year-old company. Stablecoins such as tether, which claims a one-to-one dollar convertibility, rest on our faith that their creators have the currency reserves to back them up. Why do we trust these people? And why do we feel more comfortable in giving massive amounts of personal data to companies such as Alphabet, Meta and Amazon than we do in giving it to elected, accountable governments?

The capitalist theory of trust goes back to Adam Smith: we rely on the local butcher not because we believe them to be a good person, but because they are self-interested and rely on their reputation to retain our custom. Thomas Hobbes was not so sure. After all, the butcher also faces incentives to cut corners when mincing meat. For Hobbes, we created government to protect us from our own baser instincts, including the butcher's.

Smith would probably expect cryptocurrencies to prevail and diminish the state's capacity to conduct monetary policy.

But if Hobbes was right, they are more likely to fail as trust in their backers proves misplaced and we realise that (democratic) Leviathan is still our best hope for deciding on matters of justice and fairness in society.

Tomé Ribeiro Gomes
Angra do Heroísmo, Azores, Portugal
May 21

Who takes the tea lady role in the world of Zoom?

In her article on hybrid working (Opinion, January 8) Camilla Cavendish emphasises the value of informal personal interaction between senior and junior staff in a physical office. When I joined BP, a very long time ago, everyone was assigned a grade according to their seniority. But nobody was told what their grade was. It was shrouded in absolute secrecy.

However, the tea lady knew clearly who qualified for a "cup or a pot" at tea time, or even a tray or a biscuit.

Key information lost with Zoom.

John N Turnbull
Bourne End, Buckinghamshire, UK
January 15

Britain's No 10 partying saga is stranger than fiction

Evelyn Waugh's *Vile Bodies* (1930) involves a party at Number 10 and the defenestration of a prime minister (Person in the News, January 22).

But even Waugh never thought to have his prime minister previously declare fancy dress balls illegal. It seems reality has trumped satire.

Ian MacKillop
Ilminster, Somerset, UK
January 29

How the young princess stamped her mark

Your weekend paper was most well devised, with parts of the King's declaration of service dedication on one page, juxtaposed with the late Queen's, given as a princess here in Cape Town in 1947.

One carried an informal photograph of the King, as befits a living monarch, the other a formal one, of that first official black and white portrait of the Queen, as befits a dead one. Inspired!

Well do I remember, as a boy, how that portrait was used in the first definitive stamp issue of the new reign, when standard letter postage was the red tuppence ha'penny (equivalent to 1p).

I shall never forget.

ADH Leishman
Cape Town, South Africa
September 17

Three lorry loads of scrap, and you'll get the picture

Pace Robin Lane Fox (House & Home, September 24), deep mulches can "be piled on year after year" without needing an interval for forking.

At Felbrigg (a National Trust property in Norfolk), where I have been a volunteer gardener since January 2000, every winter for the last 20 years or so, 90 tonnes of spent mushroom compost has been put on the beds in the walled garden. Ninety tonnes is three beet-lorry loads of compost or, for your readers who do not live in sugar-beet growing country, three loads from a 30-tonner more usually seen carrying scrap metal.

Penny Clarke
Norwich, Norfolk, UK
October 1

A boffin's answer to jet lag

Mark Vanhoenacker's article on jet lag and its management (View from the Cockpit, July 2) got me thinking of Godfrey Hounsfield, who was awarded the Nobel Prize in 1979 with Allan MacLeod Cormack for work on the invention of computed tomography. His approach was always to remain on Greenwich Mean Time/ British Standard Time, no matter where he was in the world, as a very popular invited lecturer.

His hosts often found scheduling his lectures during his "working day" quite difficult in Asia, America and Australia. But such was the draw of this self-effacing and modest Nobel laureate that they always accommodated his request.

David O'Keeffe
Bearna, County Galway, Ireland
July 23

Note on the letters

- This is a selection of the best readers' letters in FT Weekend in 2022. Some have been re-edited for space reasons.

Opinion

An arms race on industrial policy is the last thing Europe needs

WORLD AFFAIRS
Adam Tooze

This has been the year of industrial policy. In pursuit of rapid decarbonisation, supply chain resilience and decoupling from China, we are witnessing a redrawing of the boundary between the government and business on both sides of the Atlantic. This means picking winners and living with the risk of getting it wrong. It means getting into bed with producers who sell you their solutions in exchange for preferential treatment. It also goes hand in hand with rising international tension.

Already in 1742, David Hume was warning of conflict spurred by the "jealousy of trade". In the early 1900s, the liberal JA Hobson and the Bolshevik Vladimir Lenin agreed in denouncing the violent era of imperialism produced by the marriage of private capital with the nation state.

Then, it seemed as though rapacious business was the main driver. Today, economics still matters. It is China's gross domestic product that makes it a formidable challenger. But it isn't Jack Ma who is in the driving seat. The escalation of tension is driven by the ambition of Xi Jinping's Communist party regime and the reaction of the US national security establishment. The future once mapped by global business has been put profoundly in question. Our world is not one of Tina — there is no alternative. We are in a world of Tara — there are real alternatives, both in economics and grand strategy. And this invites the question of choice. Our world will be what the powerful make of it.

In this politicised tripolar world economy — formed by the US, EU and China — the basic source of tension is the confrontation between Washington and Beijing. On top of Russia's attack on Ukraine, escalating tension over Taiwan made 2022 the year in which a third world war became a real tail risk.

What is more surprising is that the year is ending with a row between Europe and the US over America's Inflation Reduction Act. This is no small matter. With a budget of $500bn, the IRA is the largest industrial policy response to the global climate crisis to date.

For the Europeans, the act, with its overt preference for production in North America, breaks with the global norms embodied by the World Trade Organization. French president Emmanuel Macron warns that the US risks splitting "the west". Others call for Europe to assert its strategic autonomy by launching its own industrial policy.

At one level this is predictable. There is a long history of EU-US trade spats. But even allowing for that, the EU's current response to the IRA is disproportionate and question-begging. For one, the timing is odd. The terms of the IRA deal were clear by the end of July. It was not until November in the wake of the COP27 climate talks that Europe chose to react.

The IRA's headline appropriation figure may be large, but the US economy is huge and the spending will be disbursed over 10 years. In proportional terms the act is half the size of what Europe has already committed in clean energy subsidies.

> Strategic autonomy doesn't just consist of standing up to bullies. It is defined by the fights you pick

As for the politics, far from being a bold strategic move by the Biden administration, the act emerged from desperate congressional haggling in which the terms were dictated by Joe Manchin, senator from the coal state of West Virginia.

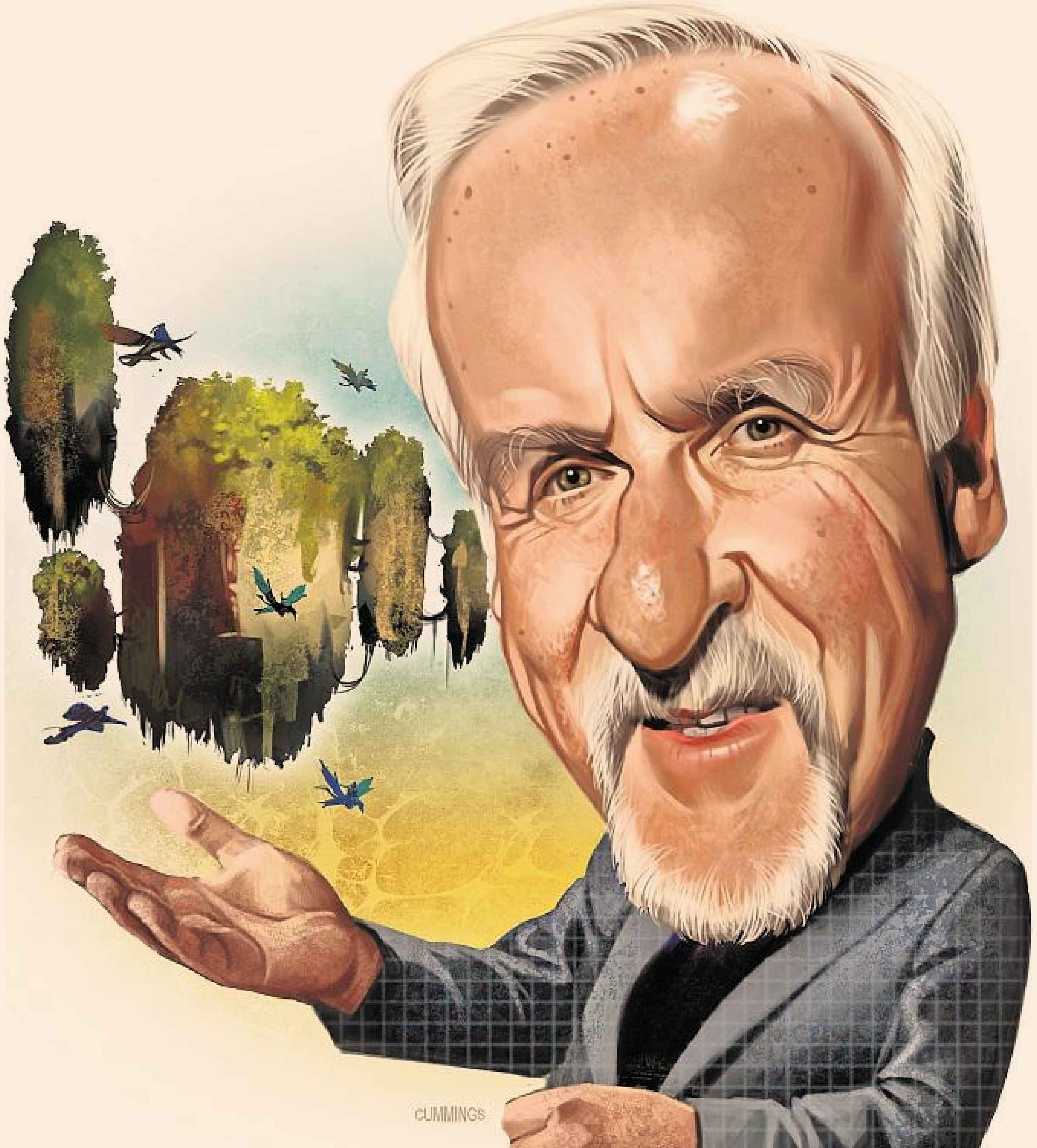
From the American point of view, the fuss the Europeans are making is gratuitous. As far as climate is concerned, the IRA is the best that the US can do. Europe must live with it. But, if Washington asks for diplomatic consideration, the same also goes in reverse. What if Europe, to overcome its own inhibitions over industrial policy, needs something to make a fuss about?

People are fond of quoting Jean Monnet's line that Europe is made through crisis. That implies a reactive alchemy in which new institutions emerge as functional responses to challenges. What this obscures is that it takes politics to define a crisis and devise a response. The least you can say about the EU's reaction to the IRA is this is a crisis Europe's leaders have chosen. But that brings us back to the key point. Strategic autonomy doesn't just consist of the capacity to stand up to global bullies. It is defined by the fights you pick.

A European clash with Congress and the Biden administration would be profoundly counterproductive. What we need is co-operation not conflict. Take the positives. A powerful US lobby has emerged to expand the green energy market, offering big opportunities for European business. If Europe wants to boost its own companies, adopt a "buy European" clause. The US won't be in a position to complain.

We are in an era of turbulent transition. New modes of industrial intervention are our best means of responding to the multiple challenges ahead. These involve countless conflicts of interest. But let us not conflate those tensions with questions of sovereignty any more than we have to. The IRA may be a morbid symptom of America's inwardly turned political process, but it does not pose an existential threat to Europe. There is no excuse for unleashing a transatlantic industrial policy arms race.

The writer is an FT contributing editor and writes the Chartbook newsletter



Person in the News | James Cameron

The sea-loving director with an eye for detail

His latest film in the 'Avatar' franchise is characteristically elaborate and big-budget, writes *Christopher Grimes*

When he was growing up in landlocked Niagara Falls, Ontario, James Cameron idolised the French ocean explorer Jacques Cousteau. A science fiction buff who was fascinated by space travel, Cameron found something otherworldly about the dazzling underwater imagery of Cousteau's television specials.

"Cousteau's shows got me excited about the fact there was an alien world right here on Earth," he said in a 2010 Ted Talk.

Cameron, 68, has been thinking about oceans and alien worlds ever since. In the 1980s, he directed *Aliens* and the deep sea epic *The Abyss*. Later came *Titanic* (1997), then the highest grossing film of all time — until Cameron beat his own box office record with the 3D sci-fi epic *Avatar,* which grossed $2.8bn after its release in December 2009.

His latest film, *Avatar: The Way of Water,* is Cameron's ultimate exploration of an alien undersea world. Thirteen years in the making and costing an estimated $350mn, much of the sequel's action takes place in the oceans of Pandora, the lush moon inhabited by blue, 10ft tall Na'vi humanoids.

The director is known for his elaborate, high-budget productions and *The Way of Water* is a classic Cameron undertaking. "In designing the oceans of Pandora, we knew we had a massive challenge," says Dylan Cole, the film's co-production designer. "For one, our director, James Cameron, knows more about the ocean than anyone."

This is not much of an exaggeration. An avid diver and ocean explorer, Cameron has filmed the wrecked remains of the Titanic and the Bismarck. He has even navigated a submarine, which he designed himself, to the bottom of the Mariana Trench, the deepest place on Earth. No surprise, then, that he spared no expense in filming the underwater scenes for *The Way of Water.* Cameron could have opted to shoot them "dry for wet," meaning that the actors would perform on stage and ocean effects would be added later. "But Jim wanted truth in their performance," explains Jon Landau, the film producer who has worked with Cameron for decades. "So we decided to build a massive water tank where actors could go in and perform their scenes."

The tanks were 30 feet deep and a giant wave machine was built to create two-metre high peaks. A free diving expert, Kirk Krack, was brought in to help the actors learn to hold their breath for long stretches; actress Kate Winslet was able to go for about seven minutes without breathing using a technique called static apnea.

It is this kind of attention to detail that defines Cameron's filmmaking process. "I think it's [a search for] perfection," Landau says. "Jim does something until he gets it right."

Rich Gelfond, the chief executive of Imax, has seen Cameron's quest for perfection up close. The director spent three months in Gelfond's offices studying every detail of how 3D cameras worked — lessons that he would later apply in the Avatar movies. "For many people, having the number one movie of all time on [two] occasions would be enough, but Jim always sets the bar higher," Gelfond says.

Yet despite his history of spending high and earning higher, some in Hollywood are asking whether his elaborate methods will pay off in the streaming era. The new movie, which clocks in at about three hours, opened last Friday and has grossed $550mn in the global box office — a healthy showing, but so far not enough for it to be profitable.

When he was a teenager, Cameron's father moved the family from Canada to Brea, California, about 90 minutes south-east of Hollywood. Cameron left high school without earning a diploma and began an existence that appeared to reject the white-collar life his father, an engineer, had carved out.

He worked as a tool and die maker for a while, drove a truck and married a woman who was working as a waitress at Bob's Big Boy — the first of his five marriages. "I just became this blue-collar guy," he told The New Yorker in 2009. "But I was constantly thinking as an artist, so I'm painting, drawing, writing, thinking about visual effects and filmmaking."

He eventually found his way to the legendary B-movie director Roger Corman, who helped launch the careers of future directors including Francis Ford Coppola. Cameron designed the spaceships for *Battle Beyond the Stars*, a *Star Wars* rip-off, which Corman admired.

> 'Every creative decision that Jim makes, shot by shot, is meant to be seen on the big screen'

Cameron had found his calling. "Filmmaking was the best way to reconcile my urge to tell stories and create images," he said in 2010. He would make his mark on Hollywood in 1984 with *The Terminator*, the sci-fi classic starring Arnold Schwarzenegger and Linda Hamilton. Cameron made the movie on a shoestring budget of about $6mn, but it raked in $80mn at the box office.

Nearly 40 years later, he is still at it. Cameron has plans for a total of five *Avatar* films; the third one has already been shot and work is under way for the fourth picture. And even as the movie industry remains wobbly from the impact of Covid and the popularity of streaming, Cameron plans to deliver films that demand to be seen in the cinema.

"Why does Jim make movies? For an audience," says Landau. "Every creative decision that Jim makes, shot by shot, is meant to be seen on the big screen. He has never lost that 16-year-old inside of him who loves going to the movies."

christopher.grimes@ft.com

Wrapping is as valuable as the presents it conceals

John Gapper
All Consuming

By the time you read this column, many of you — the lucky ones at least — will already have wrapped up your presents and they will be placed under a Christmas tree. We are not all Christian, or even religious, but the ritual of buying and covering gifts is part of the winter festival.

I used to be a recalcitrant wrapper, rushing on Christmas Eve to slap paper around presents that I had acquired in the final, overcrowded days of shopping. This year, I had the zeal of the reformed sinner, sitting down a few days ago with gift paper, Sellotape and little cards to add my labour and a personal touch to my purchases. I found the experience oddly fulfilling.

There is an ecological case against wrapping. It smacks of wasteful consumption to cover presents in paper, some of it encrusted with glitter and plastic, that will be ripped off and discarded in a few seconds. Wrapping is inherently superficial: that is the point of the practice.

But there are ways to get round this, from the Japanese *furoshiki* tradition of cloth wrapping to my colleague Jo Ellison's chic habit of using FT newsprint and old copies of HTSI magazine. Frankly, high-quality paper without glitter that can be recycled effectively is good enough for me.

Set against the minor guilt is plenty of evidence that wrapping presents matters to human relationships. Wrapping and the various traditions surrounding seasonal gift-giving transform the objects under Christmas trees from profane to sacred. Without that, as one anthropologist wrote, "The heap of loot is too obviously a pile of commodities rather than gifts."

The sociologist Theodore Caplow once undertook a detailed study of Christmas rituals in middle America (Muncie, Indiana, to be exact). He examined 366 family celebrations in 1979 and concluded that almost all of them obeyed a set of rules that made the season meaningful. One of these rules was: "Christmas gifts must be wrapped before they are presented."

It is impossible to distinguish entirely between a gift's economic worth and its relationship value. Caplow noted a scale of how much the givers spent on presents, depending on closeness to the receivers. When all were wrapped and positioned, they formed "a glittering monument to the family's affluence and mutual affection".

Wrapping tilted the symbolic balance from money to emotion. The families often took photographs of their presents, but nearly always when wrapped: a photo of one small boy with his opened presents was the only example that Caplow found in all the events. "To display unwrapped gifts as a set seems to invite the invidious comparison of gifts," he wrote.

There is more than financial delicacy involved in wrapping: it also signifies personal attention. Even if a present's recipient suspects that not enough thought went into the choice, they will be mollified by the effort given to presentation, as long as it was done by the giver and not by a shop assistant. The object may be manufactured but the wrapping is bespoke.

Ralph Waldo Emerson, the American essayist, insisted on more personal skill being put into his own presents than them being nicely wrapped. He wrote in 1844, "Rings and other jewels are not gifts, but apologies for gifts . . . it is a cold, lifeless business when you go to the shops to buy me something, which does not represent your life and talent, but a goldsmith's."

But we are not all artisans with a freshly wrought piece to give a picky literary figure at Christmas. The reality is that most of us browse in stores to find presents, or simply buy them online. Our contribution to gift giving has to come in another form than casting molten metal ourselves.

Wrapping predates the industrial revolution: it reaches back many centuries in China and Japan, where it is an intricately calibrated social ritual. Preparing gifts has long involved an element of individual craft, including decorating paper to make objects enticing.

> Since the tradition needs to signify personal effort, it is a mistake to be too accomplished

Gift paper itself has mostly been manufactured since 1917, when the Hall brothers, Hallmark's founders, started selling French decorative envelope lining as wrapping paper at their store in Kansas City, Missouri. The emotional value of wrapping now lies more in how it is arranged than made.

I used to be ashamed of my wrapping technique, and the mess I made of the seemingly easy task of covering regularly shaped objects in paper. But I have since been reassured. Since wrapping needs to signify personal effort, it is a mistake to be too accomplished.

People receiving gifts from friends that are neatly wrapped are often disappointed when they open them, one study found; they tend to prefer sloppy work. The authors attributed this to their expectations being raised too high by pristine seams and ribbons but I think there is another effect. Imperfection is personal, and so is love.

So I am happy with my clumsy packaging on the presents by our tree, and I hope that you get pleasure from yours. The wrapping may be disposable but the meaning will linger.

john.gapper@ft.com

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Companies & Markets

FINANCIAL TIMES

Brand's bad rap Adidas discovers that life wasn't meant to be Yeezy — COMPANIES, PAGE 10

End of the bubble? Wine investors toast a champagne year — MARKETS, PAGE 11

EY squeezes costs to lift profits before consulting arm spin-off

- Christmas events hit
- 'Tension' on incentives
- Audit unit funding debated

Break-up: EY plans to spin off its consulting arm as soon as March or April under what the company calls its Project Everest — Jack Taylor/Getty Images

MICHAEL O'DWYER — LONDON
STEPHEN FOLEY — NEW YORK

EY has begun cutting costs to boost profits next year, as it seeks to maximise the valuation of its consulting division ahead of a planned spin-off and public listing of the business.

Hiring, travel for internal events, training and staff Christmas parties have been targeted as part of efforts to curb expenses at the audit and consulting firm ahead of the break-up known as Project Everest, people familiar with the matter told the Financial Times.

"There's a huge clampdown on expenses to make the numbers for Everest valuation look good," said one of the people at EY's UK operations, who said the firm's bosses had cited "economic conditions" for the cuts.

The 365,000-person firm is aiming to ballot partners on the split as soon as March or April after a series of delays hammering out the details of the break-up. If approved, executives would aim to spin off the consulting and most of the tax business and list the new company on the stock exchange, while the audit business would keep the EY name and try to rebuild its advisory arm.

EY's US business also referred to the economic outlook this month as it cancelled staff holiday bonuses. High inflation has increased costs, while a darkening economic picture could squeeze clients' consulting budgets. The UK business decided against funding large staff Christmas parties this year, said three people working there.

Team leaders told staff this was about "EY trying to make itself look as profitable as possible [in order to be] ready for the split", said one of the people. The other two said some senior partners had denied the cancellations of the Christmas parties were linked to the break-up plan and cited the fact that the firm had already held large parties this summer.

EY's global executives are also trying to balance "tension" between investing in the business and short-term incentives, pushing national member firms to cut costs to lift their valuations, said people with knowledge of the matter.

EY is structured as a network of partnerships in 150 countries, which retain most of their profits locally and pay a fee to the global operation.

Local firms want to maximise their profits in the financial year ending June 2023, which will affect the valuation of the consulting business and how much of the proceeds are allocated to each country. But failure to invest could hamper the business in the longer term.

> 'There's a clampdown on expenses to make the numbers for Everest valuation look good'

The Big Four firm is also exploring whether to force partners to reinvest their cash windfalls from the spin-off as it seeks to counter concerns that the separation risks weakening the audit business, said people familiar with the matter. The flotation of the consulting business would raise about $30bn in debt and equity.

Consulting partners would be given shares in the new company, while much of the cash raised would be used to hand audit partners payments of two to four times their annual earnings to compensate them for losing their stakes in the advisory business.

National member firms will have wide latitude to decide how much, if any, of the cash must be reinvested in the audit firm, said one person familiar with the matter. The firm planned to use some of the funds to pay off debt.

Capital reinvestment was "a lever that we can pull" to address an impression in some quarters, including some US regulators, that the spin-off would enrich partners but not prioritise investment in the audit firm, the person added.

Executives have faced concerns from some current and former partners about the financial strength and resources of the audit business, which will retain part of the tax practice.

Others have questioned whether multimillion-pound cash windfalls would prompt some audit partners to accelerate their retirement.

EY declined to comment.

Three Xiaomi executives to step down as sales fall

QIANER LIU — HONG KONG
ELEANOR OLCOTT — TOKYO

Three top executives, including president Wang Xiang, are to step down at Xiaomi, as China's largest smartphone maker battles a hit to sales and profits from the country's Covid disruption.

Lu Weibing, who joined the company three years ago to lead its Redmi sub-brand, will replace Wang as president. Two co-founders, Hong Feng and Wang Chuan, will step down from daily operations, according to a note sent to employees by its chair Lei Jun and viewed by the Financial Times.

The move leaves Lei as the only co-founder left standing with an operational role in the company.

"Xiaomi achieved a smooth handover of the baton iteration," said Lei in the internal letter, adding that the company is "currently facing many difficulties" but will improve operational efficiency.

The reshuffle came at the end of a bruising year for China's tech sector, which has been reeling from a regulatory clampdown and the effects of Covid. Xiaomi has reported three consecutive quarters of falling revenues and profits.

The third-largest handset maker globally, behind Apple and Samsung, also began to shed 10 per cent of its workforce this week in multiple departments, including the flagship smartphone business.

Li Chengdong, founder of Dolphin, a Beijing-based consultancy, said the timing of Xiaomi's lay-offs was surprising — coming just as China loosened its zero-Covid policy and ahead of the Chinese new year period.

"Xiaomi's fourth-quarter results could be worse than expected," he said, adding that the group would fire such a "large" number of staff only if there was an urgent need to "control costs".

Analysts at the market intelligence provider TrendForce predicted that Xiaomi would lose market share in global smartphone sales in the three months to December, as China's economic outlook for 2022 darkened and amid falling sales in India, which has long been an important growth market and where it faces regulatory pressures.

The smartphone maker reported three consecutive quarters of falling revenues amid weaker demand

Xiaomi said the job cuts were part of "routine personnel optimisation and organisational streamlining".

The group's revenue declined 9.7 per cent to $9.8bn in the three months to September, compared with the same period in 2021.

Its net profit plunged nearly 60 per cent in the same period.

Banks

JPMorgan blames energy crisis for missed climate goals

KENZA BRYAN — LONDON

JPMorgan, the first big US bank to pledge to reduce financing for the oil and gas industry, has failed to stay on-track to meet its climate change goals, blaming the energy crisis for forcing clients to boost fossil fuel production.

The bank pledged last year to decarbonise its oil and gas portfolio by 15 per cent between 2019 and 2030 for emissions produced when the fuel an energy company sells is burnt; and by 35 per cent for the smaller amount linked to extraction and production processes.

Both of these targets were calculated using a controversial "intensity" measure, which allows for a rise in absolute carbon emissions as output grows.

Reporting on these targets for the first time, the bank said the intensity of its financed emissions linked to fuel sold by its oil and gas clients rose 1 per cent between the end of 2020 and June 2022, while the intensity measure for their operational emissions remained flat, instead of falling as planned.

Efficiency gains in oil and gas operations had been slower than expected, the bank argued, in part because of the volatility in commodity markets.

"JPMorgan are implying a challenging macroeconomic environment and higher interest rates have damped investments into cleaning up the oil and gas supply chain, like methane leakage reduction measures," said Lorne Stockman, research co-director at advocacy organisation Oil Change International.

But the US Inflation Reduction Act, which allocated billions of dollars to initiatives such as the reduction of the greenhouse gas methane, had already started boosting investment, he added.

JPMorgan was the biggest fossil fuel funder in 2021, according to the Rainforest Action Network, keeping the top spot it has occupied since at least 2016.

"It's disappointing that JPMorgan's emissions intensity is increasing at a time when they very clearly should be rapidly decreasing," Paddy McCully, at Reclaim Finance, an NGO, said.

JPMorgan said the 1 per cent rise was driven by portfolio energy groups shifting towards oil rather than gas in 2020, "against the backdrop of the pandemic and volatile commodity markets".

Banks. **Restructuring**

Goldman faces painful new year with job losses and slimmer bonuses

> Lender's president defends cost-cutting amid recession fears and falling profits

JOSHUA FRANKLIN — NEW YORK
JAMES FONTANELLA-KHAN — MILAN

Goldman Sachs chief executive David Solomon has done little to stir any festive cheer at the investment bank's headquarters in lower Manhattan.

The mood soured this month as word leaked that Goldman was preparing to cut almost 4,000 employees and considering slashing bonuses for investment bankers by at least 40 per cent.

"I'm dreading the conversations I'm going to have with my team," said one seasoned Goldman banker.

The retrenchment is a stark reversal from less than a year ago, when Solomon presented record 2021 results and staff enjoyed blockbuster bonuses.

Since then, profits at Goldman's investment bank have plummeted, it has retreated from an expensive foray into retail banking and has faced a string of damaging accusations about the treatment of female employees.

While it has been a disappointing year across much of Wall Street, the squeeze on jobs and bonuses so far is set to be tightest at Goldman, seen as the most prestigious of the big investment banks.

President John Waldron defended the cost-cutting, pointing to fears of a recession in 2023 and saying he expected other companies to follow suit.

"Everyone I know in my job or David's job is doing the same thing. The forecast is more challenging. We may be wrong, we may get a soft landing and we'll staff up again," said Waldron, a key lieutenant of Solomon since he took the top job in 2018. He would not comment on any of the reported numbers around job or bonus cuts.

Goldman executives have been keen to talk up the gains in market share made this year by the bank's market-leading mergers and acquisitions franchise, as well as robust profits at its trading business. Goldman's share price has outperformed the S&P 500 index this year. "You're going to struggle to see the bloom in that rose, but we accomplished a lot in 2022," Waldron said.

When business slows, banks such as Goldman typically manage costs by lowering bonuses. Job cuts are normally limited to a modest reduction of bottom performers each year. The lay-offs Goldman is plotting — up to 8 per cent of about 49,000 employees — go beyond the customary cull. They come after the bank expanded faster than most of Wall Street over the past three years.

Wells Fargo banking analyst Mike Mayo estimates that Goldman's headcount, excluding any additions through acquisitions, grew by 20 per cent between the first quarter of 2020 and the third quarter of this year — twice the pace of the broader industry.

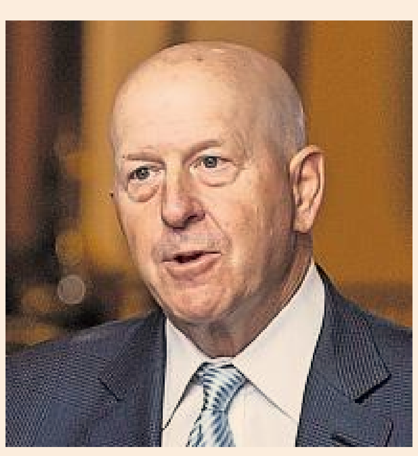
"In 2020, Goldman was one of the few large banks that committed to having no lay-offs during the pandemic," Mayo said. "In 2021, business was booming. So now you have a partial catch-up."

Goldman's hiring spree helped drive its efficiency ratio — a measure of operating expenses against net revenues — to 63.8 per cent this year, analysts estimate, up from 53.8 per cent in 2021.

The planned reductions reflect Goldman's heavy reliance on investment banking and trading for profits, despite four years of Solomon trying to build businesses with less volatile revenues. The bank is merging its asset and wealth management businesses in an effort to generate stable fee income to help offset the more unpredictable investment banking and trading revenues.

Despite the efforts, analysts forecast that Goldman's revenues and profits fell faster this year than more diversified rivals such as JPMorgan Chase, Morgan Stanley, Bank of America and Citigroup. By contrast, Goldman reported higher revenue and profit growth than peers in 2021, the final year of a bull market lasting more than a decade.

Solomon's pay last year totalled $35mn, making him the top-paid Wall Street bank CEO alongside Morgan Stanley boss James Gorman in 2021.



David Solomon: preparing to cut up to 8 per cent of Goldman's staff

Some at Goldman are also braced for top employees to quit because of disappointment over pay. "We'll probably have to rebuild [parts of] the business next year with the attrition," said a senior Goldman banker. "[Solomon] wants to run the business as lean as he can. He's taking some real risk around that."

Waldron defended the approach on pay, arguing that employees should look at it over a longer timeframe, and also pointed out that Goldman's bonuses outstripped competitors last year. "We paid our people very well last year, deservedly so. Our people knew coming into this year, in a normalised year, bonuses would be down but if you look at the two-year average, they will have made more [versus peers]," he said.

The depth of cuts has caught some of Goldman's biggest rainmakers off guard, especially traders at the global markets division who have been told their bonus pool could be down by more than 10 per cent, according to a person with knowledge of the matter. The business generated more than half of Goldman's revenues in the first nine months of 2022.

One Goldman banker said its relatively large size compared with other high-paying companies on Wall Street, such as private equity firms and hedge funds, meant its stars were at risk of being poached.

Goldman's cost base is likely to be on the agenda on January 17, when it reports fourth-quarter earnings. Six weeks later, Solomon will host the bank's second-ever investor day where top executives will give more detail on the bank's new structure following a reorganisation made back in October.

"It seems like the macro environment might not improve that much, at least in the first couple of quarters," said Kush Goel, senior research analyst at investment manager Neuberger Berman, which holds Goldman stock.

"That's why there needs to be a bigger focus on managing expenses and efficiency."

Delivering on the bank's profitability targets is crucial to winning Goldman a higher stock market valuation.

"Investors like cost control and expense discipline," said Christian Bolu, banking analyst at Autonomous Research. "The broader question ultimately then becomes: what is the Goldman Sachs story long-term?"

Black market boom shows limits of chip sanctions on China

The Top Line
June Yoon

Guards on the Zhuhai border between Macau and mainland China recently intercepted a woman wearing a fake baby bump. In many parts of the world authorities would expect to find drugs. But this appendage contained 202 processors and nine smartphones.

Chip smuggling into China is booming, creating a lucrative black market that could threaten the effectiveness of US export curbs introduced this year.

The main objective of the US measures is to prevent China from accessing high-end chips for military purposes. The latest controls are comprehensive enough to significantly slow the progress of China's military and technological development.

Yet just 1 per cent of global chip demand is from governments, including for military use. The overwhelming majority are set for consumer products. Even accounting for the chips designed for machinery or communication that may be diverted for military use, a tiny proportion are critical for military purposes.

Most chips needed for military use are based on older technology. Radars, for example, only need so-called 65nm process technology, which was developed two decades ago. Older automotive chips can be repurposed for most of those that go into aircraft, drones, and missiles, and they can be made at home by China's chipmakers. A fraction of the chips needed for military devices are the high-end variety China needs to import.

The country imported $350bn worth of chips a year before the US export controls were implemented, amounting to 50bn units each month.

The sheer number of chips traded and the comprehensive scope of the US ban mean there are not many options for China to find a workaround. But historically, countries under sanctions have always adapted, for example by importing goods through foreign affiliates of local companies or setting up shell companies to buy products, then smuggling them into the country.

Russia and North Korea have for decades evaded sanctions on items much bigger than chips, such as thermal imaging devices. Smugglers hide them among shipments of non-controlled products, using fake companies, addresses and shipping labels to cover their tracks.

China has a vast black market, initially established to help people evade high import taxes on foreign goods, that can facilitate this. Its scale and efficiency has been proved in industries as varied as Swiss watches, Korean cosmetics and refined oil.

The global chip shortage since 2020 had already fuelled a black market for chips, along with significant mark-ups.

> An analogy with drugs includes the items' small size, high value and scope for smuggling them in a fake baby bump

After the US move, with chips fetching prices up to 500 times their original level, there is even more incentive.

China has no hope of entirely circumventing the ban through clandestine trade. But nor should the US fool itself that it can completely cut off Chinese access to its technology.

Relatively few chips are needed to keep China's military advancement on track. The illicit trade suggests US sanctions could cost more than they achieve. An analogy can be drawn between chips and drugs that includes small size, high value and the scope for transporting them in a fake baby bump. In both cases, prohibition reduces supply, increases prices and fosters criminality. Contraband US technology will still dribble into China, in the same way that South American cocaine trickles into the US.

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Focused fintech chief fights to recover from crypto blow

Spotlight

Guillaume Pousaz
Chief executive, Checkout.com

Guillaume Pousaz's payments processing company has seen its crypto bet sour and taken a big hit to its valuation — Kieran Kesner for Endeavor.

Guillaume Pousaz used to run Europe's most valuable start-up. But this year, and after a gamble on crypto backfired, the 41-year-old chief executive had to watch Checkout.com's valuation come tumbling down.

A fierce competitor, from his days as a youth snowboarder to this October's Iron Man contest in Utah, Pousaz must now fight if he wants his company to regain its crown.

Pousaz founded Checkout in 2012 as a technology-focused payments processing company. The London-based start-up grew rapidly amid a boom in ecommerce transactions, garnering a $40bn valuation in January after raising money from investors such as Tiger Global and the Qatar Investment Authority.

However, last month Checkout told staff that it was cutting its internal valuation — distinct from the price paid by investors — to just $11bn. It slashed the exercise price for staff stock options by 74 per cent, reflecting a broader plunge in tech markets over the past year.

The company's investors, attracted by the $2tn payments market, still back Pousaz as the competitor determined enough to disrupt both established rivals such as Worldpay and Fiserv as well as take on relative newcomers such as Stripe and Adyen.

"I couldn't keep up with him skiing, I can't keep up with him running, I can't keep up with him on any athletic endeavour," said Deven Parekh, managing director at Insight Partners and a Checkout board member. "There's probably very few CEOs who work as hard as he does."

Raised in Geneva, Pousaz was brought up by his mother after his parents separated in the late 1990s. The separation left his family in difficult financial circumstances, an experience that people who work with Pousaz say still drives him.

In 2005, he left university in his final year and moved to California to go surfing. It was in the US that he began working in the payments industry, before undertaking an entrepreneurial journey via Mauritius and Singapore that led to the founding of Checkout in London.

> 'Investors love it. But employees? Maybe not. He pushes people very hard'

With the business already profitable, Pousaz for years batted away venture capitalists and even multibillion-dollar acquisition offers. This has left him with much tighter control of the company than most start-up founders: his stake is about 60 per cent, according to registration documents for Checkout's parent company, which is domiciled in Jersey.

Pousaz first raised venture dollars in 2019. Ophelia Brown, founder of Blossom Capital, pitched to invest in the deal after tracking the company via filings to the UK's Companies House registry for several years. "The performance was just exceptional," she said, describing Pousaz as "slightly intense, but in a good way".

"This is all he does, 18 hours a day," said another person who has worked closely with Pousaz. "Investors love it. But employees? Maybe not. He pushes people very hard."

Pousaz was fortunate that Checkout expanded amid a growing need for payment processing but he also made a strategic choice to partner with fast-growing new sectors, including neobanks such as Revolut.

"A key factor of Checkout's success was building the right products at the right time," said Tom Stafford, another board member and managing partner at DST Global. "He identified relatively early on that fintech was going to be a big sector."

However, Pousaz's bet on digital assets has proved less successful. As recently as last year, Binance was the company's top merchant by net revenue, while Crypto.com was another leading client, according to people familiar with the matter. Checkout would not comment on specific clients but said crypto and fintech clients constituted as much as half of its payment volumes last year.

However, crypto exchanges, including Binance, have seen significant investor outflows after FTX collapsed in November.

"We've been a longtime partner to the crypto industry, so we've seen ups and downs before," Checkout's chief financial officer Céline Dufétel said. "I wouldn't say that we anticipated just how much volatility has happened over the course of this year."

> 'I don't know anyone that works as hard. When you go into a meeting . . . you better be prepared'

Alongside customers such as J Sainsbury, Sony Electronics and Frasers Group, Checkout has done business with the kinds of clients that other payments processors have not, including Pornhub's owner MindGeek. OnlyFans was among its top accounts as recently as this year, according to people familiar with the business.

Adult content made up less than 15 per cent of Checkout's revenues by the time it raised its 2020 funding round, one investor said. The company said volumes and proceeds from the category were "always immaterial" and it cut any remaining ties with the adult sector earlier this year.

Checkout employees' willingness to go where its rivals have not continues to test ethical boundaries. During the early days of Russia's invasion of Ukraine, a senior commercial executive urged employees to contact prospective clients with significant Russian business as other payments groups cut off such lines, according to an internal message seen by the FT.

Checkout said it condemned the message but said it could not control the actions of every employee. Checkout "terminated Visa and Mastercard processing [in Russian roubles] before even Visa and Mastercard cut ties themselves", the company said, and it says it abides by international sanctions.

Dufétel, who also serves as chief operating officer, joined in 2021 after working in the C-suite at asset manager T Rowe Price. She said part of her role at Checkout had been to "put in place the structure and the processes that you need when you start to get to that scale".

Working in a highly regulated industry has not prevented Checkout from moving fast. Its revenues grew from $46.8mn in 2017 to $252.7mn in 2020, the most recent year for which accounts are publicly available in the UK. Checkout said the figures were not representative of its entire business.

This year's fundraising fuelled a push into the US market, which could help Checkout ahead of a mooted initial public offering. Dufétel insists Checkout is not rushing to list "and, in the current markets, even less so". Pousaz runs the company with a "very long time frame in mind", she added.

To make his own tech investments, Pousaz has also begun to build a family office called Zinal, named after a mountain village in Switzerland that marks the finishing line of a 31km mountain running race. That comes in addition to raising three children aged between two and 14, and a travel schedule that can involve spending weeks at a time flying between various offices and his home in Dubai.

"I don't know anyone that works as hard as Guillaume, this guy," said Philippe Laffont, the founder of Coatue Management and an investor in Checkout. "When you go into a meeting with Guillaume, you better be prepared."

Ivan Levingston and Tim Bradshaw, with additional reporting by Sarah White

Technology

TikTok owner admits tracking FT journalist in leaks probe

HANNAH MURPHY — LONDON

ByteDance, the Chinese owner of viral social media platform TikTok, has admitted it inappropriately obtained the data of users, including a Financial Times journalist, to analyse their location as part of an internal leaks investigation.

Over the summer, four employees on the ByteDance internal audit team looked into the sharing of internal information to journalists.

Two members of staff in the US and two in China gained access to the IP addresses and other personal data of FT journalist Cristina Criddle to work out if she was in the proximity of any ByteDance employees, the company said. However, the company failed to find any leaks.

A BuzzFeed journalist and users connected to the reporters through their TikTok accounts were also targeted.

Since June, the FT has run stories led by Criddle that revealed dozens of workers had left TikTok's London office since the beginning of this year with some reporting working 12 hours a day or being demoted after taking leave.

Some staff have also described a "kill list" of colleagues that the company wanted to force out of its London office.

Joshua Ma, the ByteDance executive in charge of its ecommerce expansion in Europe, was replaced after the FT revealed that he had told London-based employees he "didn't believe" in maternity leave.

The findings of ByteDance's internal investigation, which was led by its global legal compliance team together with an external law firm, were announced in recent days in an email to staff and first reported by The New York Times.

The inquiry was triggered by an article in Forbes about lawmakers banning the app in the US due to privacy and security concerns.

General counsel Erich Andersen wrote to staff that a "misguided plan was developed and carried out by a few individuals within the Internal Audit department this past summer", adding that those involved "misused their authority to obtain access to TikTok user data" in violation of its code of conduct.

In a separate email to staff, ByteDance chief executive Liang Rubo wrote that the company needed to "deeply reflect on our actions and think about how we can prevent similar incidents from happening again".

TikTok declined to comment further.

On the back of the revelations, one person on the employee conduct team resigned while the other three were fired. ByteDance has since restructured its internal audit team and removed access to US data from that department.

News of the tracking comes as TikTok is already facing a mounting political backlash in the US over national security concerns that data it collects on American users could be passed to the Chinese government and Communist party — claims that it denies.

The US Senate is voting on a bill to ban federal employees from using TikTok on government devices

The US Senate this week passed a bill that included a measure barring federal employees from using TikTok on government-issued devices, which was set for a vote in the House yesterday.

Meanwhile, several US states, including Maryland, Texas and Iowa, have also taken action to bar employees from installing TikTok on government devices.

For months, TikTok has been working on a national security deal with the US government in response to the scrutiny.

The deal, which has yet to be agreed, would involve partnering with Oracle to put American user data on the servers of the US cloud software company and introducing tighter controls over whether and how Chinese staffers can access that data.

The FT said: "Spying on reporters, interfering with their work or intimidating their sources is completely unacceptable. We'll be investigating this story more fully before deciding our formal response."

BUSINESS WEEK IN REVIEW

Musk loses poll

● **Twitter** users voted for Elon Musk to quit as the social network's chief executive, after the billionaire entrepreneur launched a poll via the platform asking whether he should remain at the helm following his $44bn takeover in October. Some 57.5 per cent of the 17.5mn users who responded voted for him to step down. It is unclear who Musk will select as his replacement at the San Francisco-based group or if he will honour the poll. In a tweet he said: "No one wants the job who can actually keep Twitter alive. There is no successor."

● Sam Bankman-Fried, pictured, the founder of the collapsed cryptocurrency exchange **FTX**, was granted bail on a $250mn bond after returning to the US to face several criminal charges.

● **Google**'s YouTube secured rights to broadcast some US National Football League matches from next season in a seven-year deal that signals how Big Tech is reshaping the market for live sports rights.

● **Wirecard** was a "sloppily done fraud" conceived by a group led by an "absolutist chief executive", Oliver Bellenhaus, former head of the German payments company's Dubai subsidiary, told a Munich trial.

● **Epic Games** agreed to pay a total of $520mn in two settlements with the US Federal Trade Commission over claims that the *Fortnite* developer illegally collected data on children and manipulated millions of players into making unintentional purchases.

> Former Dubai division head told a court Wirecard was a 'sloppily done fraud' by a group led by an 'absolutist chief executive'

● **Credit Suisse** launched a lawsuit against Zurich finance blog Inside Paradeplatz over what it claims were abusive comments hosted under stories about the Swiss bank, claiming all the profit the site has generated since July 27, plus 5 per cent interest.

● Scott Minerd, 63, global chief investment officer at Chicago-based financial firm **Guggenheim Partners**, died after suffering a heart attack during a workout.

● **Amazon** may be responsible for the sale of counterfeit Christian Louboutin shoes on its store, the EU's top court said, in a case that highlighted the sale of fake goods by third parties on the site.

● **Alphabet**, **Meta** and enterprise software giant **Salesforce** are among the Big Tech groups ditching offices that are part of their European headquarters as a cooling economy brings the sector's years of rapid expansion to a halt.

57.5% Percentage of those polled who want Elon Musk to quit Twitter post

$3.7bn Total amount Wells Fargo must pay for decade of mismanagement

● The global **car industry** will continue to suffer semiconductor shortages next year as the switch to electric vehicles accelerates, leading vehicle and chip manufacturers warned.

● **Wells Fargo**, the fourth-largest bank in the US by assets, was ordered to pay $3.7bn in fines and redress to customers for mismanagement of mortgages, car loans and bank accounts that spanned from 2011 until as recently as this year.

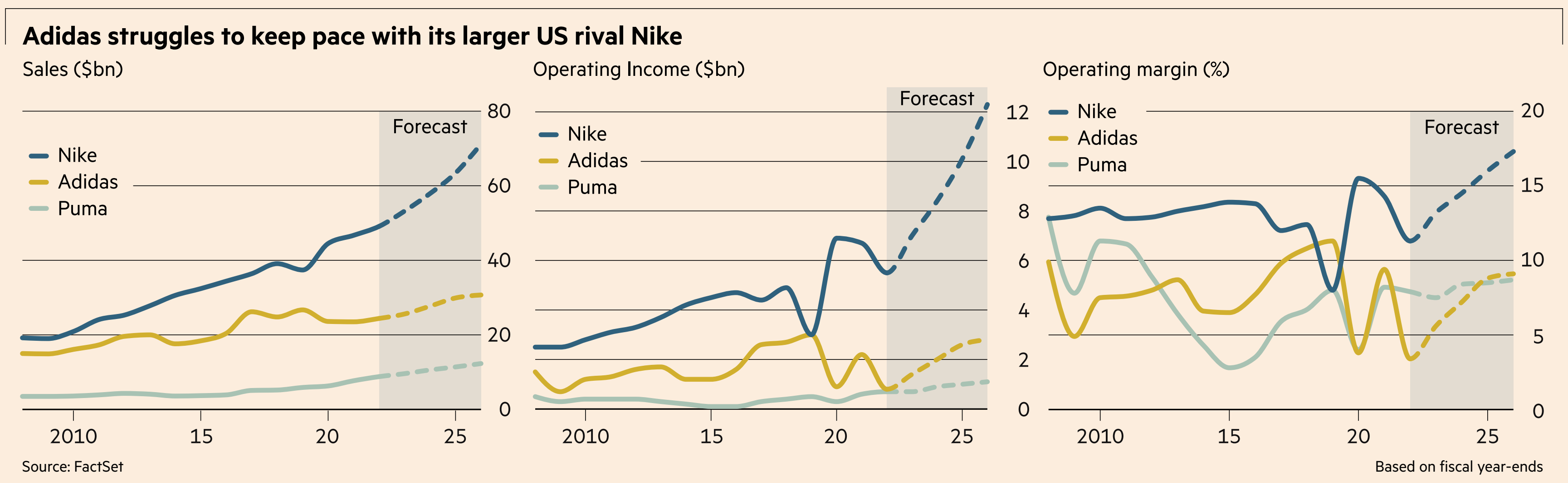
● The **Financial Reporting Council**, the UK accounting regulator, said it had discovered exam cheating at audit firms after scandals in the US, Canada and Australia prompted it to look for similar misconduct.

COMPANIES & MARKETS

Crisis-torn Adidas grapples with troubles on three fronts after giving up the Yeezy life

Sportswear brand's new boss inherits setbacks including lost tie-up with rapper, exit from Russia and retreat in China

ELEANOR OLCOTT — TOKYO
OLAF STORBECK — FRANKFURT



Bad rap: Adidas's partnership with Kanye West was lucrative but brought with it reputational problems Below: incoming boss Björn Gulden
FT montage/Radarpics/Shutterstock/Alamy/Dreamstime

When Adidas ended its lucrative partnership with Kanye West in October after a global outcry over his anti-Semitic remarks, former managers felt they had finally been vindicated.

Top staff had warned for years that the German sportswear group was over-reliant on the Yeezy trainers franchise it ran with the US rapper and fashion designer also known as Ye.

"Behind the scenes, things with Ye were bad already for a long time," one former manager said. "He was constantly misbehaving — changing his mind, postponing projects, not respecting Adidas timelines."

Founded in 1949 by Adolf "Adi" Dassler, whose brother Rudolf launched Puma the same year, Adidas has risen to become the world's second-biggest sportswear company behind Nike.

But when longstanding Puma boss Björn Gulden steps up to the top job at Adidas next month, he will inherit from Kasper Rørsted a company in crisis whose shares have plunged 54 per cent in a year.

Ye's departure, a move set to erase half the group's 2022 earnings that was announced alongside a third profit warning in four months, came on the back of two other shocks — a sales plunge in China and withdrawal from Russia, another important Adidas market.

"We have lost three profit pools in one year," said one senior manager.

Some Adidas alumni claim that the company's problems have been exacerbated by poor decision-making and a toxic leadership culture.

In interviews with 17 current and former executives, many of those who have left the company said Rørsted and his board had positioned Adidas poorly to weather the storm, firing key personnel and becoming over-reliant on the Yeezy cash cow. They also claimed the outgoing chief's "management by fear" had traumatised staff and led to an exodus of talent.

But most of those still with the company defended Rørsted's tenure, attributing the problems to unprecedented external shocks. Rørsted declined to comment.

The day last month of the appointment of Gulden, 57, a Norwegian former professional footballer who engineered a spectacular turnround at Puma, Adidas shares jumped 20 per cent.

But with the stock still trading at a six-year low, well below the darkest days of the pandemic, he is taking over one of the worst-performing European blue-chip companies.

"A whole Adidas brand reset is probably needed," Citi analyst Thomas Chauvet wrote last month in a note to clients.

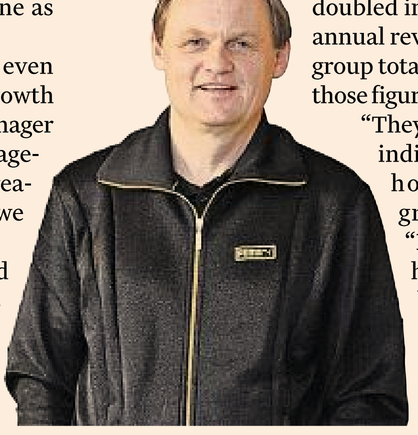
It was partly Puma's performance that cost Rørsted his job, according to people familiar with the supervisory board's thinking. Since the the pandemic began, Puma and Nike shares have significantly outperformed those of Adidas.

In the months before his departure, Adidas chair Thomas Rabe repeatedly confronted Rørsted over the company's poor total return.

Eventually, he was no longer convinced by Rørsted's defence that Adidas's woes stemmed from its higher exposure than Nike and Puma to China and Russia.

Some insiders say it was clear Adidas had problems with its product line as early as 2019.

"If we are honest to ourselves, even pre-Covid we did not have the growth we had wished for," one senior manager told the FT, adding that top management had not fully identified the reasons behind the slowdown. "Had we known it, we would have fixed it."



Several Adidas insiders pointed out that cyclical ups and downs had long been a defining factor of the sporting goods industry.

But for Ingo Speich, head of corporate governance at German asset manager and 0.8 per cent Adidas stakeholder Deka, such swings point to leadership failings.

"In the long run, the global sporting goods sector is growing about twice as fast as GDP," he said, noting that Adidas had failed to turn that trend into stable profit growth. "This is telling and says a lot about the management's quality."

Yeezy was one Adidas franchise unaffected by the 2019 slowdown. "It was the only product moving," said one person with direct knowledge of the matter.

Adidas rejects this, stressing that it was generating double-digit growth in categories such as fitness and basketball. It also told the FT that Yeezy, like all partnerships, was frequently reviewed in a formal risk management process.

That year Adidas doubled down on the brand, which at the time accounted for only about 3 per cent of sales, ramping up marketing, expanding the trainer collection and boosting supply in markets such as South America and the Middle East.

It was already clear that Ye exposed the group to reputational risk — West had issued a public apology in 2018 for saying 400 years of slavery "sound like a choice".

By late this year Yeezy had almost doubled in size, contributing €1.7bn in annual revenue, about 7 per cent of the group total. But Adidas did not disclose those figures to investors at the time.

"They did not give us enough of an indication of how big it was and how important it was to growth," one analyst said. "Probably, they didn't want to highlight how reliant they've become on the brand."

Senior Adidas figures argue that the group did try to address this, launching new partnerships with celebrities including Beyoncé, Jerry Lorenzo and Pharrell Williams.

"We want to build a portfolio of influencers," said one senior executive.

But none of the new partnerships has come close to Yeezy's commercial success.

Adidas is now sitting on unsold Yeezy shoes worth more than €500mn in potential revenue and is scrambling to find ways to sell them under its own brand to avoid a painful impairment.

The Yeezy debacle capped an already turbulent period for the company.

After the invasion of Ukraine this year Adidas decided to stop doing business in Russia, a country where it had long been the market leader that generated more than €500mn in annual sales.

It suffered an even bigger blow from a sales slump in China, where annual revenues had doubled to €5bn in the four years to 2019, with a huge operating profit margin of 30 per cent.

Early last year Adidas was caught up in a consumer backlash against western brands that refused to buy cotton from the Xinjiang region amid concerns about forced labour and other human rights violations.

Since then Chinese celebrities have shunned partnerships with the company, which has shed market share to domestic rivals.

Lockdowns have further hit China sales, which analysts expect to be just €3bn this year.

Rørsted's allies say there was little the company could have done to prevent the boycotts or lockdowns. But according to Deutsche Bank analyst Adam Cochrane, some of the current woes "were created by the company", which "possibly did not manage some of the external factors to the best of its ability".

Another problem has been a failure to retain top staff. Since 2019 at least 10 of the company's 20-strong core leadership group have left. "When you have turnover of this scale, it shows how broken things are," said one former manager.

Some attribute the churn to Rørsted's management style, which even some loyalists admit was at times "authoritarian" and which his critics say stifled creativity and critical thinking.

One former executive described internal discussions "driven by a fear culture". Another recalled how their team would "spend hours of pre-alignment to make sure how to communicate so Kasper wouldn't attack the board. It was unhealthy. We couldn't have an honest conversation."

Some spoke of being "Kaspered" by an angry Rørsted during meetings. One said there were "almost unofficial counselling groups of people who would get in touch after it happened to them".

Another recounted an incident when, after he disagreed with Rørsted during a meeting, the chief asked everyone else to leave the room before "yelling at me with a very angry face, calling me all sorts of names, making me feel I am the worst thing in the professional world . . . It was a power play. Everyone could hear what he was saying outside."

But one manager said that while Rørsted occasionally asked people to leave meetings, it was not to intimidate people but to protect them and keep sensitive topics such as hiring and promotion confidential.

Another said that in several years of working closely with Rørsted they had never witnessed an emotional outbreak. "Kasper was always very direct in his feedback but I always experienced him as very factual," the person said, in views echoed by two more senior executives.

Adidas told the FT that while it regretted individuals felt there was a problematic management style, it did not "accept this opinion", stressing that anonymous staff surveys indicated no broader dissatisfaction. "On the contrary, they show that Adidas is a good employer," the company said.

> 'Things with Ye were bad already for a long time. He was constantly misbehaving – changing his mind, postponing projects, not respecting Adidas timelines'

When Rørsted joined in 2016 from German consumer goods and chemicals conglomerate Henkel, hopes were high. He had made a name boosting efficiency, with the operating profit margin at the maker of Persil detergent, Dial soap and Loctite glue rising 50 per cent as shareholder payouts and the stock price more than tripled.

He arrived at Adidas with a mandate to cut costs and improve profitability. Initially bumper earnings affirmed Rørsted's reputation, with sales soaring more than 40 per cent to €23.6bn by 2019, while both operating profit and the dividend more than doubled. A longstanding shortfall in profitability compared with Nike, which for years had been eking out an operating margin of 11-13 per cent, seemed all but closed.

By early 2020 Rørsted had created €40bn in additional stock market value after a tripling in the Adidas share price. The group invested heavily in IT and ecommerce during his tenure, ramping up online sales sevenfold to €5bn a year. In the five years to 2020, Adidas spent €14bn on marketing and €3bn on capital expenditure, up 40 per cent on the previous five years. Rørsted also pushed margin-rich sales through Adidas retail stores and unravelled the ill-fated 2006 acquisition of Reebok.

Internally, Rørsted has been accused of excessively cutting the research and development budget, which fell 30 per cent to €130mn during his tenure.

The share of revenue generated by products younger than 12 months, a crucial metric reflecting its innovation team's recent performance, fell from 81 per cent to 67 per cent between 2015 and 2020. The company then stopped disclosing the figure.

"From a governance point of view, this is highly critical," said Deka's Speich.

Adidas told the FT that changes in its annual report were made for "editorial reasons" and did not reflect strategic decisions.

Senior executives say the fall in the reported R&D budget was an accounting quirk as the company had outsourced some tasks to suppliers.

They also point to recent successes including the Adizero shoe popular among elite marathon runners and the Adidas match ball for the football World Cup in Qatar, with its "connected ball" technology that provides data for the video assistant referee.

Some also note that the group's annual marketing budget has for years been about 12 per cent of annual sales, against about 8 per cent at Nike.

"We did continue to invest [in marketing] and will do so in future," one told the FT, adding that the problem in its marketing was not resources but efficiency.

Insiders say Gulden needs to shake up the executive board of six top leaders and bolster investment in the creative team to make product lines that can start to fill the gaping hole left by Yeezy.

A pragmatic no-nonsense manager, he will bring a deep understanding of how to run a premium sports brand.

In an interview with the FT in 2019, Gulden explained how he often slept on the floor of Asian shoe factories in the 1990s while scouting for local suppliers and that even as Puma chief, he would visit the sample room, chat with designers and offer his own ideas. "Fortunately," he said, "they don't do everything that I suggest."

"It's fair to say he went to a very different business school than Kasper," said Cochrane, adding that Gulden's "hands-on energy" was precisely what Adidas needed right now. "The whole company, the belief in what they're doing and what they're selling, needs to be reinvigorated."

Technology

Chipmaker TSMC enters talks with potential suppliers as it plans first European plant

LAULY LI, CHENG TING-FANG, PEGGY HOLLINGER AND KATHRIN HILLE

TSMC is in advanced talks with key suppliers about setting up its first potential European plant in the German city of Dresden, a move that would allow the world's largest chipmaker to capitalise on booming demand from the region's car industry.

The Taiwanese company is sending a team of senior executives to Germany early next year to discuss the level of government support for the prospective plant, as well as the capacity of the local supply chain to meet its needs, according to people familiar with the matter.

The trip will be the second in six months by TSMC executives and a final decision on whether to invest billions of dollars in a plant, which could begin construction in 2024, is expected to follow soon after, the people said.

Last year TSMC was asked by customers to consider building a plant in Europe, but halted an initial review following Russia's invasion of Ukraine. But growing demand from Europe's carmakers for a supply off locally manufactured chips has prompted TSMC to revisit the idea, the people said.

A decision to build the plant would be a boost for the EU, which is racing to cut its reliance on importing semiconductors — vital components in everything from smartphones to cars — from Asia. Brussels earlier this year approved €43bn in subsidies in a bid to attract chipmakers to Europe.

TSMC's talks with several materials and equipment suppliers are focused on whether they can also make the investments needed to support the plant.

Manufacturing chips is a complex process relying on more than 50 types of equipment, such as lithography and etching machines, and over 2,000 materials including chemicals and industrial gases. "We would try to support our customers. We wouldn't let [them] walk alone in the desert," said one executive from a supplier that would provide key materials to the Dresden plant, adding that state support would be required.

Surging energy costs and higher inflation have already prompted US chip group Intel to seek more support from the German government for its plan to build a €17bn for plant in the eastern city of Magdeburg.

Intel is still committed to investing in Europe but the Magdeburg plant had to be competitive, according to people familiar with the matter.

If TSMC presses ahead with a Dresden plant, it would focus on 22-nanometre and 28-nanometre chip technologies, similar to those it plans to make in a factory it is developing with Sony in Japan. Nanometres refer to the size of each transistor on a chip — the smaller the nanometre, the more powerful and advanced the semiconductor.

TSMC will have to weigh up whether building a plant in Dresden will put too much of a strain on its workforce. The chipmaker is already sending several hundred engineers to support new plants it is building in the US and has said it would need to deploy 500 to 600 more to help set up the factory in Japan.

A TSMC spokesperson said that "no possibility" was being ruled out regarding a potential plant in Dresden.

Alternative assets. Boom year

Wine investors savour top vintage champagne and burgundies

Fizzing over: industry insiders believe the relaxation of China's strict zero-Covid policy could revive demand in Asia for bottles of vintage champagne Yan Cong/Bloomberg

Prices pop in 2022 in stark contrast with grim year for global equity and bond trading

LAURENCE FLETCHER AND ALAN LIVSEY
LONDON

Investors in vintage champagnes and top-end burgundies are toasting a year of big gains but some of the fizz is coming out of the market as the global economic outlook worsens.

Burgundy prices soared 27.4 per cent in the first 11 months of this year, according to wine exchange Liv-ex's Burgundy 150 index, while its Champagne 50 index has jumped 21.6 per cent.

In part this reflects indulgence on the part of wealthier consumers, who have returned to restaurants after the pandemic eased, often flush with cash saved up during months of lockdowns.

Also, the supply of high-end vintages is limited. For specialist wine investors, though, this niche market has also provided a shield from soaring inflation and falling financial markets.

"It's been a phenomenal year" for vintage champagne and burgundy, said Gregory Swartberg, chief executive of London-based wine investment company Cru Wine, which manages around £30mn in client assets.

"With vintage champagne, there's just not enough of it being made" to keep up with demand, he said, adding that his business had seen record demand for fine wine from investors over the past four months. Climate change has been a big factor in reducing the supply of burgundy, which is produced in east-central France.

Unusually warm spells in early spring last year led vines to stir into life early, only for brutal frosts to kill the buds in early April. Hail in June caused further damage.

Volumes of the 2021 burgundy vintage, which is coming to market now and starts to be bottled from next summer, are down by about 50 per cent with some growers losing up to 85 per cent of their crop.

Champagne houses, which mature the wines for years before releasing them, have meanwhile been more inclined to hold bottles back to cover years of poor harvests.

Among the top-performing burgundy wines this year are Domaine Leflaive's Bâtard Montrachet 2014, a Chardonnay that soared 122 per cent to £13,952 for a case of 12 bottles, according to Liv-ex.

Prominent producer Domaine Romanée Conti's exclusive red burgundy, Grands Échézeaux 2008, doubled in price to £43,792 a case.

Among champagnes, Perrier Jouët's Belle Époque 2012 rose 68 per cent to £1,821 for a case, while Salon's Le Mesnil, one of the most sought after champagnes, posted strong gains across several vintages. Its 2007 surged 67 per cent to £12,200 per case.

Beyond such *grandes marques*, there has also been increasing demand for so-called "grower champagnes" — artisan wines made by the same person who grows the grapes.

Cédric Bouchard's 2012 La Bolorée, an unusual 100 per cent pinot blanc champagne, trades at £360 a bottle, up 80 per cent this year, according to fine wine merchants and traders Bordeaux Index.

A 2002 vintage from Jacques Selosse has jumped 63 per cent this year to £1,750 a bottle.

The strong gains stand in stark contrast to a bleak year for traditional markets.

The FTSE All World share index fell 16 per cent in the first 11 months of the year in US dollar terms, driven by sharp losses in technology stocks, while government bonds have sold off sharply as central banks have raised interest rates.

Overall, Liv-ex's Fine Wine 100 index rose 7.1 per cent this year in sterling terms, although in dollars it fell 4.3 per cent.

Yet the darkening global economic outlook is beginning to sour sentiment in the fine wine sector.

Burgundy prices fell 0.9 per cent last month and champagne dropped 2.5 per cent while the ratio of buyers to sellers in both wines has fallen sharply this year, according to Liv-ex.

Liv-ex co-founder Justin Gibbs pointed to the technology and crypto-currency sectors, where the destruction of wealth in 2022 after years of huge gains was starting to hit demand.

"We're seeing demand drop away and supply is beginning to build," he said.

'At the end of a bubble, prices get pushed really high as people scramble to get invested'

"At the end of a bubble, prices get pushed really high as people scramble to get invested. That's what it feels like," he added.

Some industry insiders such as Cru Wine's Swartberg believe the relaxation of China's strict zero-Covid policy could revive demand from Asia.

Should that happen, then one of the winners could be bordeaux, whose relative value compared with top bottles of burgundy and champagne should stick out to Chinese buyers, said Matthew O'Connell, head of investment at Bordeaux Index.

"Looking at it from an investment angle, of course, it makes sense to buy top bordeaux," said Paulo Pong at Altaya Wines in Hong Kong.

But he noted that the lighter, elegant flavours of top burgundy had definitely caught the fancy of his Chinese clients.

Nevertheless, many in the industry admit the boom period for fine wine could be ending.

"We might see the slowing down of the stratospheric price rises and some small reversals," said Tom Gearing, who was previously a finalist on the UK version of *The Apprentice* and who is now chief executive of £300mn-in-assets investment firm Cult Wine Investment.

His clients have benefited this year from buying wines such as Egly-Ouriet's Brut Millesime Grand Cru 2012, a "grower champagne" that rose about 260 per cent in value.

"We've had two years of out-performance. It would make sense for the wine market to slow down," he said.

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Commodities

Judge rejects traders' case against LME on nickel havoc disclosures

HARRY DEMPSEY

A London court has dismissed a case by hedge fund AQR Capital Management and other market participants against the London Metal Exchange, relieving the bourse from a request to disclose further information about its March decision to cancel billions of dollars worth of nickel trades.

Mr Justice Adrian Beltrami said yesterday that he deemed "the merits of the case as weak" and the disclosure request to be too wide-ranging, even if there was a "good arguable case of wrongdoing" by the world's most important hub for metals trading.

In September, AQR and four other companies filed a court application in London against the LME that was intended to get the 145-year-old exchange to hand over notes and transcripts from telephone calls and meetings to enable them to decide whether to pursue further legal action.

DWR Commodities, Flow Traders, Capstone Investment Advisors and Winton Capital Management were the other claimants with the five companies estimating this week that they collectively lost $95mn of profits as a result of the LME's intervention.

The dismissal in the High Court in London marks a small reprieve for the LME, which has been under severe pressure since March when it suspended and cancelled huge volumes of nickel trades after prices surged 250 per cent to more than $100,000 per tonne in under a day as a result of a short squeeze.

'This application was misconceived from the start. We are pleased that it has been dismissed'

A bet on falling prices by Tsingshan, the world's largest stainless steel producer run by Chinese industrialist Xiang Guangda, collided with fears of supply disruptions out of Russia.

That led to accusations that the LME, which is owned by Hong Kong Exchanges and Clearing, acted in favour of a Chinese company, while others said that it should have acted sooner to avoid the need to erase trades.

The LME still faces suits from hedge fund Elliott Management and market maker Jane Street, which are together claiming damages of almost $500mn.

The LME released last month its detailed grounds of defence against the two firms, which laid out how close the nickel market meltdown came to blowing out into a "death spiral" for the exchange and its members that would have threatened to cause a systemic collapse across metals markets.

The LME said in a statement: "This application was misconceived from the start . . . and we are pleased that it has been dismissed in its entirety."

An independent review by consultancy Oliver Wyman into the circumstances leading up to the LME's decision to cancel eight hours' worth of nickel trades is due next month.

AQR said it was "disappointed the court did not see the need for additional disclosure from the LME following their unprecedented decision to unilaterally cancel agreed upon trades this year".

One last eggnog on credit reveals the history and humanity of financial systems

ON WALL STREET

Brendan Greeley

In November and December of 1787, Joseph McClain of Libertytown in Maryland drank on credit, sometimes twice a week. He ordered grogs, slings and toddies, each noted in the neat hand of the barman, Bernard McSherry.

Americans in the late 18th century drank what seem today staggering amounts of whiskey and rum. Men ran up tabs with McSherry in the winter and paid them off at the end of the summer as their crops came in, so McClain's tab does not mean that he was particularly intemperate or improvident.

On the evening of Saturday, December 15, McClain seems to have been drinking with friends. He ordered a bowl of toddy, a round of two grogs, another round of five grogs, and then with one more grog reached the end of his tab.

McSherry noted a small debt outstanding from the previous year, a step that indicated he was about to bring up McClain's account, marking the end of credit with two long slashes. Before presenting the tab for collection, McSherry added one last line: on Christmas Eve, for a single bowl of eggnog.

I have discovered this year the pleasure of reading old ledgers. The tavern book of McSherry, sold from a private collection last year to the archives at Princeton University, is banged up.

It is stained on many pages, one hopes with grog. McSherry was a doodler and left messy arithmetic on the flyleaves of his book.

He kept careful records in its pages, not because he wanted to but because he had to — and so his accounts read like a short film from someone's real life.

Sometimes these lives were otherwise poorly recorded. McSherry and his brother-in-law, Richard Coale, for example, kept tabs for free black men in Libertytown, one reason the ledgers did so well at auction.

Ledgers also remind us that, historically, there has never been any single kind of money. Rather, in most places and certainly in Libertytown, there were different kinds of money, valuable for different reasons, working together as a part of a system with rules that everyone understood.

Anyone looking through the records of McSherry's tavern or Coale's store to prove that money is either a social system of credit or market system of metal will be disappointed.

McSherry's book at first suggests a pure credit system, based on local trust. Book credits were common, not just among tavern keepers in America but with the trades as well.

In Libertytown, some drinkers ran up a tab and then paid it down with bushels of oats. Sometimes they would transfer their debts to each other with McSherry's records functioning like a town payment system. After Joseph McClain's debt was brought up, he worked some of it off by cutting wood. The rest remained on the book, secured by a note from a John Loveman, a standard practice for questionable debts.

But most of the men with tabs simply paid them off with a note that read "by cash". The word cash is frustrating for monetary historians.

Ledgers also remind us that, historically, there has never been any single kind of money

There is never a description of what cash *was* in ledgers because everyone at the time already knew.

In colonial Maryland, paper money had been relatively well managed, anchored to a fund invested in the stock of the Bank of England.

With that connection severed, Maryland in the 1780s tried several experiments, issuing both shillings and dollars, secured by state land or prominent merchants.

But there seem to have been coins on the barrelhead, too. A table in the back of Richard Coale's book notes exchange values in British sterling pounds and shillings for nine different European gold coins — doubloons, moidores, carolines, guineas.

Coale also recorded an exchange rate, roughly three times sterling, for what seem to be Maryland pounds and shillings, the currency of record in Libertytown.

This means two things, neither of them a clean, satisfying story. Foreign gold coins were possibly circulating and definitely served as a measure of value. Maddeningly, Coale did not record a rate for silver Spanish milled dollars, the future anchor for American dollars.

And postcolonial state paper money did not collapse. It held a value that left the currency of book credits inflated over sterling but not hyperinflationary.

McSherry's ledger holds lessons for everyone.

For bitcoin enthusiasts eager to point out the collapse of private crypto exchanges based on credit, Libertytown offers an example of a spontaneous local credit exchange, with consistent rules, a central book-keeper, predictable credit limits and different avenues of remediation for debtors.

For the historians who write the history of money as the history of credit and law, the foreign hard coins in a local credit system offer a complication.

For the designers of central bank digital currencies, cash — liquid, portable, anonymous — was a crucial part of clearing debts, even in a local system of trust.

And for the people who want to build decentralised finance with automatic contracts, the Libertytown books offer a single moment of human decision, an act of grace in finance: an eggnog, on credit, at Christmas.

Brendan Greeley is an FT contributing editor

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MARKET DATA

WORLD MARKETS AT A GLANCE

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Change during previous day's trading (%)

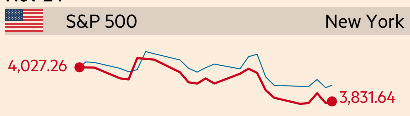
S&P 500	Nasdaq Composite	Dow Jones Ind	FTSE 100	FTSE Eurofirst 300	Nikkei	Hang Seng	FTSE All World $	$ per €	$ per £	¥ per $	£ per €	Oil Brent $ Sep	Gold $
0.24%	-0.22%	0.27%	0.05%	-0.04%	-1.03%	-0.44%	No change	0.094%	0.249%	0.450%	-0.114%	-0.06%	-0.93%

Stock Market movements over last 30 days, with the FTSE All-World in the same currency as a comparison

AMERICAS

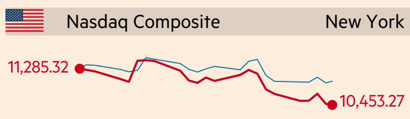
Nov 24 - - Index All World

S&P 500 New York



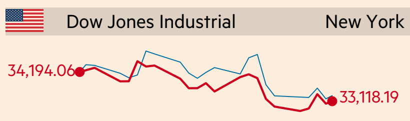
Day 0.24% Month -4.86% Year -18.93%

Nasdaq Composite New York



Day -0.22% Month -7.38% Year -33.23%

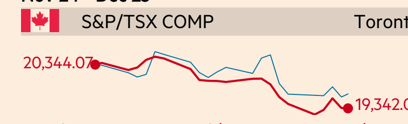
Dow Jones Industrial New York



Day 0.27% Month -3.14% Year -7.87%

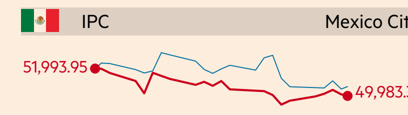
Nov 24 - Dec 23 Index All World

S&P/TSX COMP Toronto



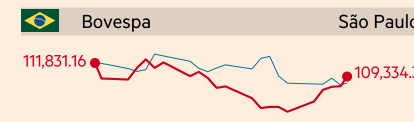
Day 0.56% Month -4.06% Year -8.29%

IPC Mexico City



Day 1.02% Month -2.65% Year -3.87%

Bovespa São Paulo

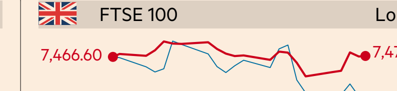


Day 1.95% Month 0.77% Year 4.56%

EUROPE

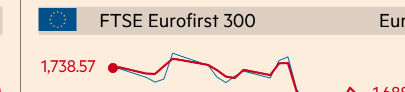
Nov 24 - Dec 23 Index All World

FTSE 100 London



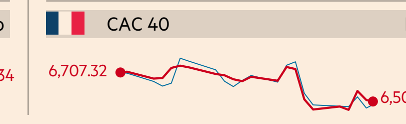
Day 0.05% Month 0.11% Year 1.36%

FTSE Eurofirst 300 Europe



Day -0.04% Month -2.55% Year -9.91%

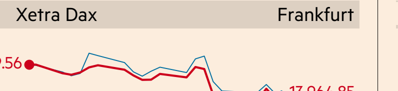
CAC 40 Paris



Day -0.20% Month -2.29% Year -7.75%

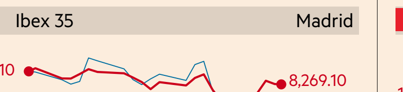
Nov 24 - Dec 23 Index All World

Xetra Dax Frankfurt



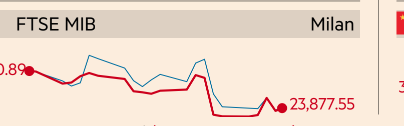
Day 0.19% Month -0.32% Year NaN%

Ibex 35 Madrid



Day -0.04% Month -0.67% Year -2.25%

FTSE MIB Milan

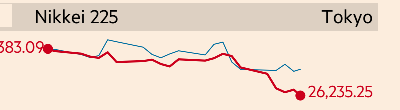


Day 0.27% Month -2.94% Year -11.04%

ASIA

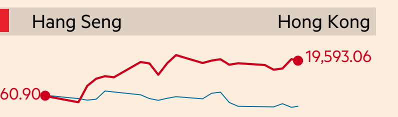
Nov 24 - Dec 23 Index All World

Nikkei 225 Tokyo



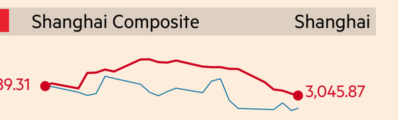
Day -1.03% Month -6.70% Year -8.16%

Hang Seng Hong Kong



Day -0.44% Month 12.57% Year -15.10%

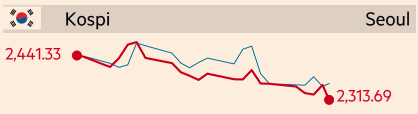
Shanghai Composite Shanghai



Day -0.28% Month -1.39% Year -15.92%

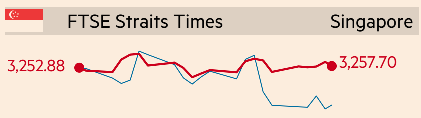
Nov 24 - Dec 23 Index All World

Kospi Seoul



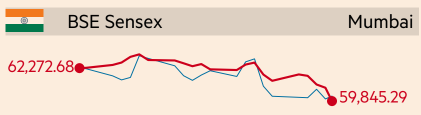
Day -1.83% Month -3.81% Year -22.48%

FTSE Straits Times Singapore



Day -0.36% Month -0.11% Year 5.45%

BSE Sensex Mumbai



Day -1.61% Month -2.47% Year 5.22%

Country	Index	Latest	Previous
Argentina	Merval	185613.27	181785.97
Australia	All Ordinaries	7287.80	7335.20
	S&P/ASX 200	7107.70	7152.50
	S&P/ASX 200 Res	5999.30	6035.50
Austria	ATX	3139.08	3117.79
Belgium	BEL 20	3725.83	3723.15
	BEL Mid	9564.05	9526.72
Brazil	IBovespa	109643.75	107551.52
Canada	S&P/TSX 60	1175.16	1168.65
	S&P/TSX Comp	19458.74	19349.66
	S&P/TSX Div Met & Min	1571.06	1597.20
Chile	S&P/CLX IGPA Gen	27766.89	27554.40
China	FTSE A200	10171.04	10190.30
	FTSE B35	9000.71	8988.96
	Shanghai A	3192.64	3201.51
	Shanghai B	275.28	284.45
	Shanghai Comp	3045.87	3054.43
	Shenzhen A	2039.93	2045.74
	Shenzhen B	1135.63	1139.80
Colombia	COLCAP	1261.61	1260.21
Croatia	CROBEX	2013.05	2011.29

Country	Index	Latest	Previous
Cyprus	CSE M&P Gen	68.46	68.68
Czech Republic	PX	1198.40	1190.94
Denmark	OMXC Copenahgen 20	1829.16	1821.52
Egypt	EGX 30	14482.93	14541.98
Estonia	OMX Tallinn	1762.09	1758.66
Finland	OMX Helsinki General	10912.68	10896.53
France	CAC 40	6504.90	6517.97
	SBF 120	4997.20	5004.08
Germany	M-DAX	25248.11	25105.45
	TecDAX	2903.57	2907.99
	XETRA Dax	13940.93	13914.07
Greece	Athens Gen	921.00	924.20
	FTSE/ASE 20	2229.99	2239.11
Hong Kong	Hang Seng	19593.06	19679.22
	HS China Enterprise	6642.90	6716.32
	HSCC Red Chip	3615.25	3615.98
Hungary	Bux	45007.80	45538.06
India	BSE Sensex	59845.29	60826.22
	Nifty 500	15046.00	15431.50
Indonesia	Jakarta Comp	6800.67	6824.43
Ireland	ISEQ Overall	7181.70	7184.12
Israel	Tel Aviv 125	1810.52	1828.66

Country	Index	Latest	Previous
Italy	FTSE Italia All-Share	25881.40	25820.46
	FTSE Italia Mid Cap	39437.39	39364.54
	FTSE MIB	23877.55	23813.30
Japan	2nd Section	7228.27	7239.06
	Nikkei 225	26235.25	26507.87
	S&P Topix 150	1627.57	1636.97
	Topix	1897.94	1908.17
Jordan	Amman SE	2475.49	2474.43
Kenya	NSE 20	1663.36	1654.71
Kuwait	KSX Market Index	6633.44	6603.51
Latvia	OMX Riga	1140.61	1129.42
Lithuania	OMX Vilnius	948.34	948.69
Luxembourg	LuxX	1473.09	1463.37
Malaysia	FTSE Bursa KLCI	1474.68	1468.35
Mexico	IPC	50607.93	50097.22
Morocco	MASI	10968.04	10950.62
Netherlands	AEX	701.06	700.40
	AEX All Share	958.12	956.86
New Zealand	NZX 50	11494.96	11523.96
Nigeria	SE All Share	49499.43	49475.43
Norway	Oslo All Share	1017.37	1006.88
Pakistan	KSE 100	39669.20	39838.33

Country	Index	Latest	Previous
Philippines	Manila Comp	6541.03	6520.80
Poland	Wig	57022.24	57088.69
Portugal	PSI 20	5781.18	5763.54
	PSI General	4473.65	4466.80
Romania	BET Index	12147.12	12162.53
Russia	Micex Index	2436.57	2445.30
	RTX	1245.71	1212.57
Saudi-Arabia	TADAWUL All Share Index	10215.79	10276.94
Singapore	FTSE Straits Times	3257.70	3269.53
Slovakia	SAX	339.60	339.60
Slovenia	SBI TOP	-	-
South Africa	FTSE/JSE All Share	73493.47	73225.13
	FTSE/JSE Res 20	71801.97	71216.65
	FTSE/JSE Top 40	67323.76	67100.07
South Korea	Kospi	2313.69	2356.73
	Kospi 200	302.07	307.48
Spain	IBEX 35	8269.10	8272.10
Sri Lanka	CSE All Share	8379.95	8397.12
Sweden	OMX Stockholm 30	2054.33	2043.30
	OMX Stockholm AS	784.89	778.89
Switzerland	SMI Index	10804.68	10774.64

Country	Index	Latest	Previous
Taiwan	Weighted Pr	14271.63	14442.94
Thailand	Bangkok SET	1617.55	1616.67
Turkey	BIST 100	5454.79	5454.79
UAE	Abu Dhabi General Index	9222.93	9251.11
UK	FT 30	2794.30	2776.60
	FTSE 100	7473.01	7469.28
	FTSE 4Good UK	6725.74	6720.65
	FTSE All Share	4083.66	4079.25
	FTSE techMARK 100	6309.11	6271.51
USA	DJ Composite	10990.49	10943.54
	DJ Industrial	33118.19	33027.49
	DJ Transport	13517.15	13421.10
	DJ Utilities	971.52	966.24
	Nasdaq 100	10938.44	10956.14
	Nasdaq Cmp	10453.27	10476.12
	NYSE Comp	15143.80	15081.53
	S&P 500	3831.64	3822.39
	Wilshire 5000	37972.49	37899.75
Venezuela	IBC	16014.76	16142.10
Vietnam	VNI	1020.34	1022.61

Country	Index	Latest	Previous
Cross-Border	DJ Global Titans ($)	404.65	404.52
	Euro Stoxx 50 (Eur)	3816.60	3823.29
	Euronext 100 ID	1241.78	1243.81
	FTSE 4Good Global ($)	9415.00	9411.79
	FTSE All World ($)	399.23	399.24
	FTSE E300	1688.62	1689.34
	FTSE Eurotop 100	3330.59	3334.84
	FTSE Global 100 ($)	2421.58	2421.06
	FTSE Gold Min ($)	1752.98	1767.84
	FTSE Latibex Top (Eur)	4440.00	4432.20
	FTSE Multinationals ($)	2581.65	2619.81
	FTSE World ($)	723.48	722.82
	FTSEurofirst 100 (Eur)	4499.05	4502.52
	FTSEurofirst 80 (Eur)	5192.34	5199.53
	MSCI ACWI Fr ($)	604.39	610.14
	MSCI All World ($)	2595.25	2626.92
	MSCI Europe (Eur)	1729.98	1743.33
	MSCI Pacific ($)	2637.81	2626.26
	S&P Euro (Eur)	1716.71	1717.75
	S&P Europe 350 (Eur)	1730.26	1731.74
	S&P Global 1200 ($)	2878.92	2875.02
	Stoxx 50 (Eur)	3676.55	3682.76

(c) Closed. (u) Unavaliable. † Correction. ♥ Subject to official recalculation. For more index coverage please see www.ft.com/worldindices. A fuller version of this table is available on the ft.com research data archive.

STOCK MARKET: BIGGEST MOVERS

AMERICA

ACTIVE STOCKS	stock traded m's	close price	Day's change
Tesla	134.4	122.96	-2.39
Apple	44.8	130.88	-1.35
Nvidia	30.2	151.49	-1.90
Microsoft	25.3	237.94	-0.25
Amazon.com	23.7	84.40	0.61
Advanced Micro Devices	17.2	63.84	-0.02
Meta Platforms	10.5	117.04	-0.08
Alphabet	9.9	89.14	1.38
Alphabet	8.5	89.65	1.39
Netflix	7.3	294.77	-2.98

BIGGEST MOVERS	Close price	Day's change	Day's chng%
Ups			
Apa	46.51	1.82	4.07
Hess	140.69	5.39	3.98
Conocophillips	116.62	4.42	3.94
Carmax	59.29	2.09	3.65
Pioneer Natural Resource Co	227.78	7.63	3.46
Downs			
Moderna	199.68	-8.66	-4.16
Carnival	7.68	-0.20	-2.54
Tesla	122.96	-2.39	-1.90
3m	119.60	-1.99	-1.64
First Solar	154.55	-2.34	-1.49

Based on the constituents of the S&P500 and the Nasdaq 100 index

LONDON

ACTIVE STOCKS	stock traded m's	close price	Day's change
Bp	63.3	478.90	1.00
Glencore	55.3	558.00	1.00
Astrazeneca	44.9	11238.00	-68.00
Shell	40.2	2366.50	14.00
Diageo	33.7	3647.50	-15.50
Prudential	30.2	1116.50	17.00
Rio Tinto	27.4	5808.00	69.00
Anglo American	23.6	3249.50	45.50
Vodafone	22.9	83.90	0.17
Hsbc Holdings	21.3	510.30	-2.00

BIGGEST MOVERS	Close price	Day's change	Day's chng%
Ups			
888 Holdings	86.65	3.80	4.59
Ferrexpo	172.90	7.20	4.35
Marshalls	277.40	9.40	3.51
Ibstock	154.00	4.90	3.29
Molten Ventures	341.60	10.80	3.26
Downs			
Coats	68.30	-4.50	-6.18
Apax Global Alpha	185.20	-4.40	-2.32
Spirent Communications	260.20	-5.00	-1.89
Chemring	293.50	-5.50	-1.84
Hikma Pharmaceuticals	1545.50	-28.50	-1.81

Based on the constituents of the FTSE 350 index

EURO MARKETS

ACTIVE STOCKS	stock traded m's	close price	Day's change
Nestle N	198.6	108.83	-0.16
Asml Holding	191.6	515.50	-7.30
Roche Gs	167.4	297.97	0.30
Novartis N	155.2	85.51	0.18
Totalenergies	131.3	59.28	0.28
Lvmh	102.7	673.30	-10.70
Intesa Sanpaolo	89.6	2.09	0.01
Unicredit	88.5	13.28	0.05
Novo Nordisk B A/s	85.5	125.67	0.20
Ubs N	83.1	17.46	0.19

BIGGEST MOVERS	Close price	Day's change	Day's chng%
Ups			
Philips Kon	14.02	0.50	3.68
A.p. M__ller - M__rsk B A/s	2137.51	59.84	2.88
A.p. M__ller - M__rsk A A/s	2103.22	56.48	2.76
Volkswagen Ag St O.n.	149.55	3.70	2.54
Cs N	2.87	0.06	2.19
Downs			
Siemens Health.ag Na O.n.	45.53	-0.80	-1.73
Hermes Intl	1440.50	-24.00	-1.64
Lvmh	673.30	-10.70	-1.56
Asml Holding	515.50	-7.30	-1.40
Amadeus It	49.22	-0.54	-1.09

Based on the constituents of the FTSEurofirst 300 Eurozone index

TOKYO

ACTIVE STOCKS	stock traded m's	close price	Day's change
Mitsubishi Ufj Fin,.	1336.7	898.00	28.50
Sumitomo Mitsui Fin,.	756.0	5350.00	94.00
Tokyo Electron	538.6	39200.00	-1500.00
Softbank .	458.4	5757.00	-29.00
Tokyo Electric Power ,orporated	412.6	514.00	15.00
Eisai Co.,	385.2	8674.00	-326.00
Kawasaki Kisen Kaisha,	377.3	2876.00	-84.00
Nippon Yusen Kabushiki Kaisha	375.8	3169.00	-60.00
Fast Retailing Co.,	362.1	79090.00	-260.00
Toyota Motor	346.6	1818.00	-23.00

BIGGEST MOVERS	Close price	Day's change	Day's chng%
Ups			
Kansai Electric Power Co	1257.00	63.00	5.28
Fukuoka Fin,.	3050.00	139.00	4.77
Ms&ad Insurance Holdings,.	4335.00	180.00	4.33
T&d Holdings, .	1899.00	68.00	3.71
Mitsubishi Ufj Fin,.	898.00	28.50	3.28
Downs			
Advantest	8500.00	-400.00	-4.49
Sapporo Holdings	3265.00	-135.00	-3.97
Nippon Sheet Glass ,	551.00	-22.00	-3.84
Tokyo Electron	39200.00	-1500.00	-3.69
Eisai Co.,	8674.00	-326.00	-3.62

Based on the constituents of the Nikkei 225 index

UK MARKET WINNERS AND LOSERS

FTSE 100	Dec 23 price(p)	%Chg week	%Chg ytd
Winners			
Beazley	678.50	6.9	45.9
Centrica	96.72	6.4	35.5
Antofagasta	1544.00	5.9	15.5
Prudential	1116.50	5.7	-
Melrose Industries	131.05	5.6	-16.1
Shell	2366.50	5.5	45.8
Bp	478.90	5.2	43.8
Glencore	558.00	5.1	47.7
Rolls-royce Holdings	91.68	5.0	-
Anglo American	3249.50	4.8	7.6
Admiral	2106.00	4.5	-33.1
Endeavour Mining	1771.00	4.4	9.3
Losers			
Halma	1990.50	-3.7	-
United Utilities	986.80	-3.3	-10.0
Sage	745.80	-3.2	-
Auto Trader	518.20	-3.0	-29.5
London Stock Exchange	7130.00	-2.9	3.3
Rightmove	516.60	-2.7	-
Bunzl	2778.00	-2.6	-5.7
Scottish Mortgage Investment Trust	721.60	-2.1	-
Int Consolidated Airlines S.a.	128.18	-1.9	-
Experian	2807.00	-1.8	-
Burberry	2004.00	-1.8	10.6
Intercontinental Hotels	4725.00	-1.7	-0.9

FTSE 250	Dec 23 price(p)	%Chg week	%Chg ytd
Winners			
Volution	380.00	12.3	-
Drax	701.50	9.9	14.7
Ferrexpo	172.90	8.4	-
Vesuvius	401.80	7.9	-9.7
Tullow Oil	37.70	7.8	-
Mitie	77.90	7.7	21.3
Hilton Food	553.00	7.6	-
Itv	74.24	6.9	-
Clarkson	3150.00	6.4	-
Wood (john)	135.00	6.3	-
Essentra	241.50	6.2	-
Lancashire Holdings	638.50	6.1	23.2
Losers			
Aston Martin Lagonda Global Holdings	150.00	-13.5	-
National Express	127.10	-10.0	-
Carnival	580.00	-5.4	-
Darktrace	266.00	-4.7	-
Integrafin Holdings	291.60	-4.5	-
Dechra Pharmaceuticals	2628.00	-3.8	-
Molten Ventures	341.60	-3.8	-
Watches Of Switzerland	812.50	-3.6	-
Videndum	1052.00	-3.5	-
Balanced Commercial Property Trust	86.60	-3.5	-
Easyjet	340.70	-3.0	-
Kainos	1523.00	-3.0	-

FTSE SmallCap	Dec 23 price(p)	%Chg week	%Chg ytd
Winners			
Superdry	117.40	16.9	-
Nanoco	44.50	16.8	-
Trifast	69.00	15.8	-56.9
Fisher (james) & Sons	385.50	13.0	6.1
Saga	125.50	12.1	-
Int Personal Finance	71.45	10.9	-
Hunting	332.00	10.7	108.1
Home Reit	39.40	9.7	-
Oxford Biomedica	439.00	9.1	-
Restaurant	29.54	9.0	-68.6
Rank	78.80	8.8	-
Capital & Regional	60.00	8.3	-0.9
Losers			
Treatt	596.00	-7.0	-
Pendragon	17.85	-6.8	-
Kin And Carta	217.00	-6.7	-26.4
Trustpilot	95.05	-5.6	-
Ao World	52.40	-5.4	-
Baillie Gifford Us Growth Trust	150.10	-5.0	-
Manchester & London Investment Trust	324.00	-5.0	-
Pod Point Holdings	58.58	-4.9	-79.9
Costain	38.50	-4.7	-
Aurora Investment Trust	194.50	-4.7	-
Fuller, Smith & Turner	493.00	-4.1	-27.7
Medica	137.00	-3.5	-

Industry Sectors	Dec 23 price(p)	%Chg week	%Chg ytd
Winners			
Oil & Gas Producers	8236.25	5.0	43.4
Industrial Metals	7871.62	4.3	23.5
Nonlife Insurance	3331.33	4.1	1.4
Life Insurance	7028.32	3.9	-8.0
Mining	11104.55	3.6	-
Construction & Materials	6825.82	3.3	-
Banks	3274.83	3.0	7.6
Electricity	10639.93	2.4	5.7
Household Goods	10060.16	2.2	-
Aerospace & Defense	5115.48	1.9	21.8
General Retailers	3389.24	1.8	17.3
Food Producers	5689.95	1.4	-
Losers			
Automobiles & Parts	1443.57	-6.9	-
General Financial	11528.80	-2.4	-0.4
Software & Computer Services	1766.14	-1.4	-
Personal Goods	30281.14	-1.3	-
Electronic & Electrical Equip.	8700.98	-1.0	-
Travel & Leisure	6281.87	-0.5	-17.7
Industrial Transportation	3464.42	-0.1	-25.0
Gas Water & Multiutilities index	5634.13	-0.1	-5.1
Real Estate & Investment Servic	2143.36	-0.1	-
Support Services	9971.77	0.0	-
Industrial Engineering	13858.20	0.1	-
Chemicals	11734.26	0.4	-

Based on last week's performance. †Price at suspension.

CURRENCIES

Dec 23	Currency	DOLLAR Closing Mid	DOLLAR Day's Change	EURO Closing Mid	EURO Day's Change	POUND Closing Mid	POUND Day's Change
Argentina	Argentine Peso	174.8735	0.2935	185.6013	0.5374	210.9070	0.9036
Australia	Australian Dollar	1.4924	-0.0047	1.5840	-0.0030	1.8000	-0.0009
Bahrain	Bahrainin Dinar	0.3770	-	0.4001	0.0005	0.4547	0.0012
Bolivia	Bolivian Boliviano	6.9100	-	7.3339	0.0089	8.3338	0.0218
Brazil	Brazilian Real	5.1283	-0.0484	5.4430	-0.0446	6.1851	-0.0420
Canada	Canadian Dollar	1.3586	-0.0073	1.4419	-0.0060	1.6385	-0.0045
Chile	Chilean Peso	880.3000	12.3050	934.3027	14.1829	1061.6897	17.5730
China	Chinese Yuan	6.9874	0.0084	7.4160	0.0179	8.4272	0.0320
Colombia	Colombian Peso	4744.9300	-16.7900	5036.0125	-11.6602	5722.6440	-5.2610
Costa Rica	Costa Rican Colon	583.6950	-3.2550	619.5023	-2.6952	703.9680	-2.0778
Czech Republic	Czech Koruna	22.8035	-0.0364	24.2024	-0.0091	27.5023	0.0279
Denmark	Danish Krone	7.0064	-0.0091	7.4362	-0.0006	8.4501	0.0111
Egypt	Egyptian Pound	24.7518	0.0303	26.2702	0.0641	29.8520	0.1144
Hong Kong	Hong Kong Dollar	7.8040	0.0089	8.2828	0.0195	9.4121	0.0353
Hungary	Hungarian Forint	376.7608	-1.7355	399.8734	-1.3523	454.3940	-0.9016
India	Indian Rupee	82.8650	0.1025	87.9484	0.2159	99.9397	0.3842

Dec 23	Currency	DOLLAR Closing Mid	DOLLAR Day's Change	EURO Closing Mid	EURO Day's Change	POUND Closing Mid	POUND Day's Change
Indonesia	Indonesian Rupiah	15592.5000	10.0000	16549.0580	30.7806	18805.4054	61.0873
Israel	Israeli Shekel	3.5023	0.0065	3.7171	0.0114	4.2239	0.0188
Japan	Japanese Yen	132.8500	0.5950	140.9998	0.8026	160.2243	1.1340
..One Month		132.8494	0.5939	140.9995	0.8021	160.2238	1.1328
..Three Month		132.8484	0.5918	140.9990	0.8010	160.2227	1.1308
..One Year		132.8435	0.5821	140.9956	0.7943	160.2238	1.1264
Kenya	Kenyan Shilling	123.2500	0.1500	130.8109	0.3185	148.6462	0.5684
Kuwait	Kuwaiti Dinar	0.3065	-	0.3252	0.0004	0.3696	0.0010
Malaysia	Malaysian Ringgit	4.4250	-	4.6965	0.0057	5.3368	0.0139
Mexico	Mexican Peso	19.4315	-0.1310	20.6235	-0.1137	23.4354	-0.0964
New Zealand	New Zealand Dollar	1.5903	-0.0084	1.6879	-0.0068	1.9180	-0.0051
Nigeria	Nigerian Naira	455.7500	-	483.7084	0.5897	549.6593	1.4348
Norway	Norwegian Krone	9.8815	0.0128	10.4877	0.0264	11.9176	0.0466
Pakistan	Pakistani Rupee	225.6500	0.1500	239.4927	0.4510	272.1462	0.8908
Peru	Peruvian Nuevo Sol	3.8063	0.0065	4.0398	0.0118	4.5906	0.0198
Philippines	Philippine Peso	55.1600	0.0450	58.5438	0.1191	66.5260	0.2278

Dec 23	Currency	DOLLAR Closing Mid	DOLLAR Day's Change	EURO Closing Mid	EURO Day's Change	POUND Closing Mid	POUND Day's Change
Poland	Polish Zloty	4.3718	-0.0044	4.6400	0.0010	5.2726	0.0085
Romania	Romanian Leu	4.6227	0.0014	4.9063	0.0075	5.5753	0.0163
Russia	Russian Ruble	69.4450	0.3450	73.7052	0.4556	83.7544	0.6336
Saudi Arabia	Saudi Riyal	3.7605	-0.0005	3.9912	0.0043	4.5354	0.0112
Singapore	Singapore Dollar	1.3507	-0.0022	1.4336	-0.0006	1.6290	0.0016
South Africa	South African Rand	17.0063	-0.1612	18.0495	-0.1489	20.5105	-0.1404
South Korea	South Korean Won	1280.9000	4.7500	1359.4779	6.6926	1544.8353	9.7465
Sweden	Swedish Krona	10.5279	0.0694	11.1737	0.0871	12.6972	0.1166
Switzerland	Swiss Franc	0.9335	0.0030	0.9907	0.0044	1.1258	0.0065
Taiwan	New Taiwan Dollar	30.7350	0.0585	32.6205	0.1018	37.0681	0.1671
Thailand	Thai Baht	34.7275	0.0675	36.8579	0.1165	41.8833	0.1905
Tunisia	Tunisian Dinar	3.1188	-0.0063	3.3101	-0.0027	3.7614	0.0022
Turkey	Turkish Lira	18.6728	-0.0023	19.8182	0.0218	22.5204	0.0561
United Arab Emirates	UAE Dirham	3.6724	0.0000	3.8977	0.0047	4.4291	0.0115
United Kingdom	Pound Sterling	0.8291	-0.0022	0.8800	-0.0012	-	-
..One Month		0.8293	-0.0022	0.8799	-0.0012	-	-

Dec 23	Currency	DOLLAR Closing Mid	DOLLAR Day's Change	EURO Closing Mid	EURO Day's Change	POUND Closing Mid	POUND Day's Change
..Three Month		0.8294	-0.0022	0.8796	-0.0012	-	-
..One Year		0.8298	-0.0021	0.8787	-0.0012	-	-
United States	United States Dollar	-	-	1.0613	0.0013	1.2061	0.0031
..One Month		-	-	1.0611	-0.1416	1.2062	0.0031
..Three Month		-	-	1.0606	-0.1416	1.2063	0.0031
..One Year		-	-	1.0592	-0.1415	1.2067	0.0032
Vietnam	Vietnamese Dong	23585.0000	-65.0000	25031.8530	-38.4064	28444.8085	-3.9652
European Union	Euro	0.9422	-0.0012	-	-	1.1363	0.0016
..One Month		0.9419	-0.0012	-	-	1.1362	0.0016
..Three Month		0.9415	-0.0011	-	-	1.1360	0.0016
..One Year		0.9401	-0.0011	-	-	1.1350	0.0016

Rates are derived from WM Reuters Spot Rates and MorningStar (latest rates at time of production). Some values are rounded. Currency redenominated by 1000. The exchange rates printed in this table are also available at www.FT.com/marketsdata

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Produced in conjunction with the Institute and Faculty of Actuaries

	£ Strlg Dec 23	Day's chge%	Euro Index	£ Strlg Dec 22	£ Strlg Dec 21	Year ago	Div yield%	Cover	P/E ratio	X/D adj	Total Return
FTSE 100 (100)	7473.01	0.05	6624.34	7469.28	7497.32	7373.34	3.64	1.61	17.04	272.44	7678.70
FTSE 250 (250)	18830.08	0.36	16691.65	18762.07	18863.65	23266.75	3.22	0.78	39.85	557.39	15682.03
FTSE 250 ex Inv Co (171)	19283.17	0.42	17093.28	19202.48	19324.07	24101.38	3.33	1.62	18.54	590.06	16386.58
FTSE 350 (350)	4123.10	0.09	3654.86	4119.19	4135.64	4216.65	3.58	1.50	18.58	146.16	8407.28
FTSE 350 ex Investment Trusts (268)	4065.07	0.08	3603.42	4061.67	4077.40	4111.14	3.64	1.70	16.19	146.33	4283.85
FTSE 350 Higher Yield (132)	3569.00	0.18	3163.69	3562.56	3576.75	3329.87	5.01	1.74	11.49	169.23	8215.99
FTSE 350 Lower Yield (218)	4251.92	0.00	3769.05	4251.71	4268.74	4853.72	2.09	0.91	52.59	92.89	5236.51
FTSE SmallCap (235)	6211.90	0.62	5506.45	6173.84	6191.05	7364.68	3.52	-0.24	-117.23	210.45	10459.25
FTSE SmallCap ex Inv Co (126)	4979.87	0.96	4414.33	4932.29	4949.55	6137.43	3.74	2.32	11.50	164.16	8719.58
FTSE All-Share (585)	4083.66	0.11	3619.90	4079.25	4095.42	4194.71	3.58	1.46	19.14	144.56	8408.59
FTSE All-Share ex Inv Co (394)	3991.29	0.10	3538.02	3987.47	4002.90	4049.03	3.64	1.71	16.10	143.50	4270.54
FTSE All-Share ex Multinationals (522)	1060.57	0.28	779.32	1057.61	1064.39	1336.15	4.01	0.82	30.58	41.02	2261.11
FTSE Fledgling (81)	11531.44	-0.24	10221.88	11559.72	11505.45	13150.14	3.78	3.06	8.66	376.63	25028.85
FTSE Fledgling ex Inv Co (31)	14954.00	-0.44	13255.75	15020.64	14872.66	17521.77	3.60	7.68	3.62	470.00	31484.72
FTSE All-Small (316)	4331.19	0.57	3839.32	4306.70	4316.92	5124.23	3.54	-0.05	-580.79	146.49	9353.90
FTSE All-Small ex Inv Co (157)	3745.93	0.91	3320.52	3711.99	3723.21	4608.04	3.74	2.50	10.69	123.30	8306.55
FTSE AIM All-Share (736)	831.96	0.70	737.48	826.18	830.44	1194.88	1.70	1.68	34.96	13.42	978.21
FTSE All-Share Technology (20)	1889.97	0.00	1571.25	1889.95	1912.87	2363.32	2.02	0.89	55.68	39.97	2738.04
FTSE All-Share Telecommunications (6)	1393.69	0.03	1158.66	1393.31	1401.56	1860.52	7.60	1.04	12.68	99.22	2131.05
FTSE All-Share Health Care (14)	14693.74	-0.40	12215.85	14752.80	14686.06	13111.21	2.55	1.05	37.43	374.42	13609.25
FTSE All-Share Financials (255)	4543.10	0.11	3776.97	4537.95	4550.72	4899.19	3.73	0.90	29.87	167.29	5057.59
FTSE All-Share Real Estate (55)	814.03	0.84	707.96	807.28	813.39	1219.72	4.37	3.63	6.32	34.25	859.17
FTSE All-Share Consumer Discretionary (83)	4507.68	-0.03	3747.53	4509.14	4530.38	5468.73	2.44	1.27	32.40	108.48	4782.38
FTSE All-Share Consumer Staples (24)	19494.23	-0.07	16206.81	19508.64	19626.43	19722.30	3.93	1.13	22.55	765.85	17942.20
FTSE All-Share Industrials (84)	6192.43	0.13	5148.16	6184.56	6231.20	7383.85	2.32	1.36	31.86	139.01	7172.74
FTSE All-Share Basic Materials (22)	9363.21	0.79	7784.24	9289.39	9370.86	8208.12	5.81	2.01	8.57	539.20	12764.84
FTSE All-Share Energy (13)	8517.45	0.44	7081.10	8479.74	8497.32	6028.59	3.54	2.82	10.01	303.49	10364.59
FTSE All-Share Utilities (9)	8481.63	-0.32	7051.33	8509.01	8545.63	8779.23	4.53	0.57	38.52	384.09	12948.99
FTSE All-Share Software and Computer Services (18)	2036.81	-0.04	1693.34	2037.56	2062.08	2540.78	2.02	0.89	55.60	43.17	3121.79
FTSE All-Share Technology Hardware and Equipment (2)	5148.75	2.54	4280.49	5021.31	5114.01	6636.38	2.34	0.69	61.55	92.89	6673.52
FTSE All-Share Telecommunications Equipment (1)	581.65	-1.89	483.56	592.82	598.19	637.53	2.11	2.31	20.49	11.51	831.41
FTSE All-Share Telecommunications Service Providers (5)	2134.50	0.12	1774.55	2131.89	2144.18	2871.52	7.87	1.02	12.45	157.08	2974.74
FTSE All-Share Health Care Providers (3)	10952.04	-0.07	9105.14	10959.37	10961.87	8404.52	0.53	4.88	38.48	58.27	10165.26
FTSE All-Share Medical Equipment and Services (2)	5567.05	0.55	4628.25	5536.74	5518.69	5881.04	2.56	0.97	40.40	142.76	5377.56
FTSE All-Share Pharmaceuticals and Biotechnology (9)	21025.80	-0.45	17480.10	21121.71	21023.67	18606.39	2.58	1.04	37.27	539.80	17535.31
FTSE All-Share Banks (12)	3231.76	-0.17	2686.77	3237.40	3239.72	3003.25	4.04	2.63	9.42	129.94	2861.30
FTSE All-Share Finance and Credit Services (8)	9913.32	-0.57	8241.58	9970.56	9943.85	10073.11	2.14	2.28	20.55	210.32	13321.80
FTSE All-Share Investment Banking and Brokerage Services (31)	8335.23	0.21	6929.61	8317.50	8409.76	10631.36	5.32	1.55	12.16	440.48	11778.83
FTSE All-Share Closed End Investments (191)	11553.43	0.29	9605.11	11519.81	11581.91	14187.64	2.76	-3.45	-10.50	308.94	7244.74
FTSE All-Share Life Insurance (6)	7149.17	0.76	5943.56	7095.52	7106.65	7759.96	4.29	1.08	21.59	294.59	8748.77
FTSE All-Share Nonlife Insurance (7)	3749.32	0.37	3117.05	3735.60	3715.26	3656.95	3.82	1.24	21.13	130.27	7984.69
FTSE All-Share Real Estate Investment and Services (10)	2052.38	0.49	1706.27	2042.32	2058.26	3126.02	2.47	3.66	11.05	43.02	6125.50
FTSE All-Share Real Estate Investment Trusts (45)	2024.02	0.90	1682.70	2006.02	2021.11	3013.56	4.71	3.62	5.86	93.67	3080.62
FTSE All-Share Automobiles and Parts (2)	1450.97	0.42	1206.28	1444.94	1473.26	3560.43	0.78	-34.22	-3.74	14.02	1509.50
FTSE All-Share Consumer Services (2)	3181.73	-0.10	2645.17	3184.88	3162.84	2734.38	1.21	2.76	30.03	38.43	4036.01
FTSE All-Share Household Goods and Home Construction (11)	8405.10	0.44	6987.70	8368.61	8406.11	14891.90	8.84	1.60	7.05	710.24	7563.31
FTSE All-Share Leisure Goods (2)	22809.01	0.00	18962.60	22809.01	23114.40	25538.65	2.96	1.59	21.18	831.45	25490.88
FTSE All-Share Personal Goods (4)	26065.28	-0.57	21669.75	26213.63	26366.32	30706.31	2.16	2.80	16.55	558.37	20501.53
FTSE All-Share Media (11)	9336.86	-0.16	7762.33	9351.39	9371.74	9931.92	2.37	1.47	28.72	221.42	6569.43
FTSE All-Share Retailers (22)	1833.17	0.20	1524.03	1829.59	1845.33	2781.61	3.00	3.08	10.82	54.81	2392.99
FTSE All-Share Travel and Leisure (29)	6145.14	-0.05	5108.85	6148.19	6217.65	7501.20	0.66	-7.30	-20.78	40.99	6356.06
FTSE All-Share Beverages (5)	27929.09	-0.38	23219.25	28036.65	28275.12	31214.80	2.15	2.00	23.26	601.76	22396.55
FTSE All-Share Food Producers (10)	5889.38	0.61	4896.22	5853.45	5877.35	6906.81	2.62	2.27	16.80	152.70	5736.77
FTSE All-Share Tobacco (2)	35986.06	-0.15	29917.53	36040.77	36307.03	29374.83	6.60	0.87	17.47	2373.83	34239.19
FTSE All-Share Construction and Materials (15)	7244.57	0.21	6022.87	7229.05	7272.21	8923.96	3.19	0.66	47.75	230.56	8839.82
FTSE All-Share Aerospace and Defense (7)	5368.55	-0.42	4463.23	5391.45	5387.46	4367.70	2.19	0.10	459.22	104.10	6547.98
FTSE All-Share Electronic and Electrical Equipment (11)	10258.68	0.15	8528.71	10243.14	10426.27	14267.99	1.72	2.07	27.96	176.09	10160.58
FTSE All-Share General Industrials (8)	4879.75	0.23	4056.85	4868.34	4901.76	5665.93	2.97	1.22	27.55	151.23	6457.25
FTSE All-Share Industrial Engineering (5)	15310.93	0.98	12728.97	15162.50	15436.64	19949.82	1.71	2.01	29.16	261.52	20566.72
FTSE All-Share Industrial Support Services (30)	9595.11	0.16	7977.04	9579.35	9639.11	12377.38	2.01	1.67	29.83	196.21	11050.94
FTSE All-Share Industrial Transportation (8)	5235.38	0.11	4352.51	5229.47	5298.42	6973.19	2.13	3.34	14.08	102.86	5490.04
FTSE All-Share Industrial Materials (1)	17303.23	0.00	546.50	17303.23	16753.13	19753.69	1.90	1.81	29.09	329.06	21856.56
FTSE All-Share Industrial Metals and Mining (9)	8475.83	0.81	7046.50	8407.41	8482.62	6847.90	6.18	2.02	8.01	517.75	13010.90
FTSE All-Share Precious Metals and Mining (5)	10499.75	0.55	8729.12	10442.55	10478.27	18452.01	3.44	1.83	15.93	358.99	7402.68
FTSE All-Share Chemicals (7)	12947.42	0.69	10764.02	12858.83	12978.87	18169.43	2.70	1.82	20.30	355.95	13008.05
FTSE All-Share Oil. Gas and Coal (12)	8268.59	0.45	6874.21	8231.95	8249.08	5850.68	3.54	2.82	10.01	294.63	10434.93
FTSE Sector Indices											
Non Financials (330)	**4993.66**	**0.11**	**4426.56**	**4988.36**	**5009.76**	**5056.87**	**3.54**	**1.63**	**17.35**	**174.82**	**9048.19**

Hourly movements	8.00	9.00	10.00	11.00	12.00	13.00	14.00	15.00	16.00	High/day	Low/day
FTSE 100	7472.72	7476.19	7485.51	7485.49	7478.66	7473.01	0.00	0.00	0.00	7496.32	7463.29
FTSE 250	18749.25	18783.33	18814.52	18846.29	18830.83	18830.08	0.00	0.00	0.00	18875.43	18733.66
FTSE SmallCap	6169.74	6171.22	6177.40	6197.74	6209.50	6211.90	0.00	0.00	0.00	6212.55	6165.15
FTSE All-Share	4080.37	4083.01	4088.31	4089.61	4086.22	4083.66	0.00	0.00	0.00	4095.23	4075.67

Time of FTSE 100 Day's high:10:31:15 Day's Low08:09:15 FTSE 100 2010/11 High: 7672.40(10/02/2022) Low: 6826.15(12/10/2022)
Time of FTSE All-Share Day's high:10:31:00 Day's Low08:09:00 FTSE 100 2010/11 High: 4296.96(10/02/2022) Low: 3712.50(12/10/2022)

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FT 30 INDEX

	Dec 23	Dec 22	Dec 21	Dec 20	Dec 19	Yr Ago	High	Low
FT 30	2794.30	2776.60	2752.80	2706.40	2740.00	0.00	2870.10	2450.90
FT 30 Div Yield	-	-	-	-	-	0.00	3.93	2.74
P/E Ratio net	-	-	-	-	-	0.00	19.44	14.26

FT 30 hourly changes

8	9	10	11	12	13	14	15	16	High	Low
2776.6	2792.8	2793.2	2792.1	2794.1	2793.9	2794.7	2798	2798.2	2800.5	2776.6

FT30 constituents and recent additions/deletions can be found at www.ft.com/ft30

FT WILSHIRE 5000 INDEX SERIES

	Dec 22		Dec 22
FT Wilshire 5000	38723.61	FT Wilshire Mid Cap	5290.79
FT Wilshire 2500	4958.89	FT Wilshire Small Cap	4729.99
FT Wilshire Mega Cap	4927.87	FT Wilshire Micro Cap	4584.96
FT Wilshire Large Cap	4988.23		

Source: Wilshire. Wilshire Advisors LLC (Wilshire) is an investment advisor registered with the SEC. Further information is available at https://www.wilshire.com/solutions/indexes . Wilshire® is a registered service mark. Copyright ©2022 Wilshire. All rights reserved.

FTSE GLOBAL EQUITY INDEX SERIES

Dec 23 Regions & countries	No of stocks	US $ indices	Day %	Mth %	YTD %	Total retn	YTD %	Gr Div Yield
FTSE Global All Cap	9441	678.82	-0.9	-2.2	-19.9	1089.12	-18.1	2.4
FTSE Global All Cap	9441	678.82	-0.9	-2.2	-19.9	1089.12	-18.1	2.4
FTSE Global Large Cap	1898	607.33	-0.9	-2.1	-20.0	1004.37	-18.2	2.4
FTSE Global Mid Cap	2257	879.88	-0.9	-2.0	-18.0	1328.43	-16.2	2.3
FTSE Global Small Cap	5286	896.74	-0.9	-3.1	-21.6	1293.99	-20.1	2.2
FTSE All-World	4155	399.24	-0.9	-2.1	-19.7	678.37	-17.9	2.4
FTSE World	2664	722.82	-1.0	-2.6	-19.5	1648.20	-17.7	2.4
FTSE Global All Cap ex UNITED KINGDOM In	9152	716.06	-0.9	-2.3	-20.1	1126.78	-18.4	2.3
FTSE Global All Cap ex USA	7634	489.71	-0.1	1.5	-18.4	871.59	-15.8	3.3
FTSE Global All Cap ex JAPAN	8037	706.95	-1.0	-2.5	-20.1	1144.36	-18.3	2.3
FTSE Global All Cap ex Eurozone	8782	717.44	-0.9	-2.4	-19.8	1126.09	-18.1	2.3
FTSE Developed	2174	663.03	-1.1	-2.7	-19.6	1070.85	-18.0	2.2
FTSE Developed All Cap	5815	690.49	-1.1	-2.8	-19.8	1098.72	-18.2	2.2
FTSE Developed Large Cap	833	620.91	-1.2	-2.8	-19.9	1020.63	-18.3	2.2
FTSE Developed Europe Large Cap	218	378.53	-1.1	1.1	-15.8	750.57	-13.1	3.2
FTSE Developed Europe Mid Cap	353	563.58	-1.2	0.5	-26.9	970.18	-24.8	3.1
FTSE Dev Europe Small Cap	743	792.94	-1.0	0.4	-28.2	1311.35	-26.1	3.2
FTSE North America Large Cap	235	817.77	-1.5	-4.8	-21.6	1230.25	-20.3	1.8
FTSE North America Mid Cap	422	1087.41	-1.2	-3.8	-16.8	1513.52	-15.3	1.9
FTSE North America Small Cap	1330	1055.53	-1.3	-5.2	-20.0	1407.64	-18.8	1.7
FTSE North America	657	537.28	-1.5	-4.6	-20.7	826.44	-19.4	1.8
FTSE Developed ex North America	1517	260.99	-0.4	1.6	-17.2	500.05	-14.7	3.2
FTSE Japan Large Cap	169	374.90	0.6	2.0	-17.8	551.16	-15.7	2.6
FTSE Japan Mid Cap	339	528.93	0.7	2.7	-13.8	738.58	-11.6	2.7
FTSE Global wi JAPAN Small Cap	896	588.57	0.8	2.8	-15.4	853.50	-13.1	2.8
FTSE Japan	508	154.40	0.6	2.1	-17.0	254.16	-14.9	2.6
FTSE Asia Pacific Large Cap ex Japan	1081	676.14	1.2	4.7	-18.9	1233.62	-16.5	3.2
FTSE Asia Pacific Mid Cap ex Japan	859	965.10	0.4	4.5	-14.9	1697.81	-12.2	3.5
FTSE Asia Pacific Small Cap ex Japan	2053	535.48	0.6	2.5	-26.4	914.67	-24.4	3.2
FTSE Asia Pacific Ex Japan	1940	538.70	1.1	4.7	-18.5	1044.56	-16.1	3.2
FTSE Emerging All Cap	3626	705.19	0.9	3.5	-19.9	1231.98	-17.1	3.6
FTSE Emerging Large Cap	1065	651.56	1.1	3.9	-20.8	1145.03	-18.0	3.6
FTSE Emerging Mid Cap	916	1020.93	0.0	2.4	-11.2	1793.15	-8.0	3.9
FTSE Emerging Small Cap	1645	751.31	0.2	1.7	-22.5	1254.89	-19.8	3.5
FTSE Emerging Europe	116	127.46	0.1	9.4	-69.2	267.29	-67.9	2.8
FTSE Latin America All Cap	261	702.22	0.4	-0.4	-1.0	1399.73	8.3	10.3
FTSE Middle East and Africa All Cap	331	719.60	-0.7	-4.1	-9.7	1319.79	-6.9	3.3
FTSE Global wi UNITED KINGDOM All Cap In	289	314.62	-1.1	1.1	-12.6	644.55	-9.4	3.6
FTSE Global wi USA All Cap	1807	922.38	-1.4	-4.6	-20.9	1337.65	-19.6	1.7
FTSE Europe All Cap	1465	428.23	-1.1	1.1	-20.0	815.24	-17.5	3.2
FTSE Eurozone All Cap	659	413.70	-1.2	0.8	-20.2	781.38	-17.7	3.2
FTSE EDHEC-Risk Efficient All-World	4155	461.17	-0.7	-1.5	-15.5	727.45	-13.4	2.7
FTSE EDHEC-Risk Efficient Developed Europe	571	312.19	-1.0	1.0	-24.4	549.63	-22.1	3.3
Oil & Gas	129	400.60	-1.6	-5.8	22.2	823.81	28.4	4.8
Oil & Gas Producers	86	398.12	-1.5	-6.0	25.3	841.20	32.1	5.1

Dec 23 Sectors	No of stocks	US $ indices	Day %	Mth %	YTD %	Total retn	YTD %	Gr Div Yield
Oil Equipment & Services	24	273.23	-1.9	-5.7	16.8	507.61	21.7	4.3
Basic Materials	392	598.79	-0.8	0.1	-11.0	1104.68	-7.0	4.5
Chemicals	195	782.11	-0.8	-3.2	-19.3	1386.07	-16.9	3.2
Forestry & Paper	20	254.81	-0.5	0.0	-16.5	516.85	-13.4	4.0
Industrial Metals & Mining	99	495.03	-0.5	0.9	-10.5	949.63	-5.6	5.2
Mining	78	976.49	-1.0	5.0	4.9	1906.70	11.5	5.9
Industrials	802	486.74	-0.9	-2.0	-19.0	777.51	-17.3	2.1
Construction & Materials	156	556.95	-0.7	-1.6	-24.6	938.42	-23.0	2.3
Aerospace & Defense	35	893.65	-1.6	1.6	11.3	1396.47	13.0	1.5
General Industrials	76	237.21	-0.8	-2.1	-14.5	419.78	-12.3	2.6
Electronic & Electrical Equipment	157	602.45	-0.6	-3.6	-25.1	866.40	-23.9	1.6
Industrial Engineering	158	983.00	-1.3	-0.9	-15.0	1564.41	-13.3	2.0
Industrial Transportation	131	909.18	-0.2	-1.1	-18.1	1482.66	-15.4	3.6
Support Services	89	501.48	-1.3	-4.4	-29.4	747.08	-28.4	1.6
Consumer Goods	566	539.44	-0.8	-1.2	-21.7	908.64	-20.0	2.5
Automobiles & Parts	132	439.82	-3.0	-10.7	-43.1	710.78	-42.3	2.4
Beverages	72	776.20	-0.4	0.9	-3.7	1322.42	-1.5	2.2
Food Producers	134	722.31	-0.3	0.0	-8.0	1246.43	-5.9	2.5
Household Goods & Home Construction	64	540.13	0.2	3.6	-17.4	911.14	-15.2	2.7
Leisure Goods	53	230.51	0.5	-1.2	-27.6	326.22	-26.6	1.5
Personal Goods	97	920.49	-0.3	4.1	-20.3	1419.66	-18.8	1.9
Tobacco	14	1005.41	-0.1	2.4	4.6	2883.19	10.9	6.1
Health Care	339	728.77	-0.1	1.4	-7.7	1162.85	-6.1	1.7
Health Care Equipment & Services	132	1368.56	-0.2	0.8	-17.7	1680.65	-16.9	1.0
Pharmaceuticals & Biotechnology	207	497.80	-0.1	1.8	0.2	854.10	2.5	2.2
Consumer Services	428	514.01	-0.7	-2.5	-27.0	734.53	-26.2	1.3
Food & Drug Retailers	69	317.95	-0.1	-1.2	-7.6	506.12	-5.5	2.4
General Retailers	141	892.08	-0.9	-3.4	-30.2	1220.03	-29.6	1.0
Media	75	288.64	-0.3	-3.3	-38.5	415.06	-37.8	1.4
Travel & Leisure	143	441.94	-0.7	-0.2	-13.8	645.88	-12.8	1.2
Telecommunication	89	128.09	0.2	-2.5	-13.6	302.57	-10.1	4.4
Fixed Line Telecommuniations	31	99.83	0.3	-2.5	-11.4	271.43	-6.9	5.3
Mobile Telecommunications	58	151.58	0.2	-2.4	-14.7	308.15	-11.7	3.9
Utilities	199	320.49	-0.5	1.4	-6.6	751.23	-3.6	3.3
Electricity	141	363.11	-0.6	1.5	-5.8	837.72	-3.0	3.2
Gas Water & Multiutilities	58	315.52	-0.3	1.3	-8.5	766.50	-5.2	3.6
Financials	852	257.50	-0.5	-1.4	-14.2	495.70	-11.5	3.2
Banks	269	196.24	-0.3	-1.8	-13.3	421.22	-9.8	4.2
Nonlife Insurance	72	364.77	-0.5	1.8	4.1	609.58	7.2	2.9
Life Insurance	52	224.96	-0.5	4.5	-6.9	434.23	-3.2	3.9
Financial Services	209	420.26	-1.0	-3.5	-15.8	638.84	-14.4	1.8
Technology	359	443.91	-2.0	-5.1	-34.6	579.79	-33.9	1.2
Software & Computer Services	184	672.33	-1.7	-2.8	-37.1	813.60	-36.8	0.7
Technology Hardware & Equipment	175	392.23	-2.3	-7.4	-31.6	551.53	-30.6	1.7
Alternative Energy	19	188.91	-2.4	-0.2	-9.4	271.12	-9.0	0.4
Real Estate Investment & Services	142	251.29	0.5	2.9	-23.6	489.96	-21.4	3.1
Real Estate Investment Trusts	108	434.76	-0.2	-2.5	-27.1	1019.95	-24.7	4.0
FTSE Global Large Cap	1898	607.33	-0.9	-2.1	-20.0	1004.37	-18.2	2.4

The FTSE Global Equity Series, launched in 2003, contains the FTSE Global Small Cap Indices and broader FTSE Global All Cap Indices (large/mid/small cap) as well as the enhanced FTSE All-World index Series (large/mid cap) - please see www.ftse.com/geis. The trade names Fundamental Index® and RAFI® are registered trademarks and the patented and patent-pending proprietary intellectual property of Research Affiliates, LLC (US Patent Nos. 7,620,577; 7,747,502; 7,778,905; 7,792,719; Patent Pending Publ. Nos. US-2006-0149645-A1, US-2007-0055598-A1, US-2008-0288416-A1, US-2010- 0063942-A1, WO 2005/076812, WO 2007/078399 A2, WO 2008/118372, EPN 1733352, and HK1099110). "EDHEC™" is a trade mark of EDHEC Business School As of January 2nd 2006, FTSE is basing its sector indices on the Industrial Classification Benchmark - please see www.ftse.com/icb. For constituent changes and other information about FTSE, please see www.ftse.com. © FTSE International Limited. 2013. All Rights reserved. "FTSE®" is a trade mark of the London Stock Exchange Group companies and is used by FTSE International Limited under licence.

FTSE SECTORS: LEADERS & LAGGARDS

Year to date percentage changes

Oil & Gas Producers	44.33	Consumer Goods	-3.56	Oil Equipment & Serv	-19.12
Oil & Gas	43.61	Nonlife Insurance	-4.29	Construct & Material	-19.73
Mining	23.11	Gas Water & Multi	-5.38	FTSE 250 Index	-19.81
Tobacco	22.86	Life Insurance	-8.10	Support Services	-20.95
Aerospace & Defense	21.53	Travel & Leisure	-8.88	Industrial Eng	-23.41
Basic Materials	14.05	Media	-9.77	Mobile Telecomms	-25.44
Pharmace & Biotech	12.40	Leisure Goods	-10.17	Telecommunications	-25.73
Health Care	11.38	Beverages	-10.52	Fixed Line Telecomms	-26.77
Banks	7.38	Financials	-11.47	Household Goods & Ho	-27.06
Electricity	5.47	Software & Comp Serv	-13.66	Chemicals	-29.63
Personal Goods	4.19	Technology	-13.82	Food & Drug Retailer	-31.28
FTSE 100 Index	1.20	Food Producers	-14.81	Electronic & Elec Eq	-31.74
Beverages	31.66	Tech Hardware & Eq	-15.48	General Retailers	-33.49
NON FINANCIALS Index	-1.54	Industrials	-16.33	Real Est Invest & Tr	-34.46
Health Care Eq & Srv	-2.53	Financial Services	-16.38	Real Est Invest & Se	-35.37
Utilities	-2.66	FTSE SmallCap Index	-16.72	Industrial Transport	-42.58
FTSE All{HY-}Share Index	-2.96	Consumer Services	-17.04	Automobiles & Parts	-60.21
		Equity Invest Instr	-18.95	Industrial Metals &	-78.83

FTSE 100 SUMMARY

FTSE 100	Closing Price	Week's Change	FTSE 100	Closing Price	Week's Change
3I Group PLC	1315.5	39.00	Intertek Group PLC	3998	55.00
Abrdn PLC	186.50	1.40	Jd Sports Fashion PLC	119.55	1.45
Admiral Group PLC	2106	91.00	Kingfisher PLC	232.10	3.40
Airtel Africa PLC	112.80	2.90	Land Securities Group PLC	618.20	5.80
Anglo American PLC	3249.5	149.50	Legal & General Group PLC	250.60	3.70
Antofagasta PLC	1544	86.00	Lloyds Banking Group PLC	46.03	0.85
Ashtead Group PLC	4721	-37.00	London Stock Exchange Group PLC	7130	-210.00
Associated British Foods PLC	1587	34.00	M&G PLC	187.15	7.05
Astrazeneca PLC	11238	82.00	Melrose Industries PLC	131.05	7.00
Auto Trader Group PLC	518.20	-16.20	Mondi PLC	1418	0.00
Aveva Group PLC	3220	12.00	National Grid PLC	989.60	-6.20
Aviva PLC	444.00	7.90	Natwest Group PLC	264.50	5.50
B&M European Value Retail S.A.	408.80	0.40	Next PLC	5606	-20.00
Bae Systems PLC	855.00	14.20	Ocado Group PLC	626.60	-3.00
Barclays PLC	157.74	3.32	Pearson PLC	937.60	18.20
Barratt Developments PLC	403.70	4.00	Pershing Square Holdings LTD	2890	30.00
Beazley PLC	678.50	43.50	Persimmon PLC	1237.5	24.50
Berkeley Group Holdings (The) PLC	3836	38.00	Phoenix Group Holdings PLC	611.80	15.20
BP PLC	478.90	23.50	Prudential PLC	1116.5	60.00
British American Tobacco PLC	3316.5	23.00	Reckitt Benckiser Group PLC	5710	-26.00
British Land Company PLC	394.10	6.10	Relx PLC	2299	-7.00
Bt Group PLC	114.00	1.05	Rentokil Initial PLC	514.60	-3.20
Bunzl PLC	2778	-75.00	Rightmove PLC	516.60	-14.60
Burberry Group PLC	2004	-36.00	Rio Tinto PLC	5808	196.00
Centrica PLC	96.72	5.86	Rolls-Royce Holdings PLC	91.68	4.35
Coca-Cola Hbc AG	1950.5	14.50	Rs Group PLC	909.00	-10.00
Compass Group PLC	1932	31.00	Sage Group PLC	745.80	-25.00
Convatec Group PLC	232.40	5.20	Sainsbury (J) PLC	219.30	1.40
Crh PLC	3270	98.50	Schroders PLC	438.10	-0.70
Croda International PLC	6646	-66.00	Scottish Mortgage Investment Trust PLC	721.60	-15.40
Dcc PLC	4067	-1.00	Segro PLC	760.00	0.20
Diageo PLC	3647.5	23.50	Severn Trent PLC	2652	-42.00
Endeavour Mining PLC	1771	75.00	Shell PLC	2366.5	123.50
Entain PLC	1310.5	-13.00	Smith & Nephew PLC	1105.5	25.50
Experian PLC	2807	-52.00	Smith (Ds) PLC	324.50	12.80
F&C Investment Trust PLC	895.00	2.00	Smiths Group PLC	1590.5	20.00
Flutter Entertainment PLC	11500	45.00	Smurfit Kappa Group PLC	3078	44.00
Frasers Group PLC	728.00	-7.00	Spirax-Sarco Engineering PLC	10680	-175.00
Fresnillo PLC	872.60	18.20	Sse PLC	1707	18.50
Glaxosmithkline PLC	1452.8	24.80	St. James's Place PLC	1091	-3.00
Glencore PLC	558.00	26.90	Standard Chartered PLC	625.00	8.20
Haleon PLC	324.10	11.35	Taylor Wimpey PLC	103.15	2.65
Halma PLC	1990.5	-76.50	Tesco PLC	226.70	4.40
Hargreaves Lansdown PLC	850.60	-3.40	Unilever PLC	4214	73.00
Homeserve PLC	1197	2.00	Unite Group PLC	901.00	8.00
HSBC Holdings PLC	510.30	18.05	United Utilities Group PLC	986.80	-33.20
Imperial Brands PLC	2082	32.00	Vodafone Group PLC	83.90	0.14
Informa PLC	615.20	7.60	Weir Group PLC	1673.5	29.00
Intercontinental Hotels Group PLC	4725	-82.00	Whitbread PLC	2624	22.00
International Consolidated Airlines Group S.A.	128.18	-2.52	Wpp PLC	816.60	18.40

UK STOCK MARKET TRADING DATA

	Dec 23	Dec 22	Dec 21	Dec 20	Dec 19	Yr Ago
Order Book Turnover (m)	19.81	89.11	1046.34	45.09	93.57	93.57
Order Book Bargains	204940.00	514068.00	513710.00	476735.00	851537.00	851537.00
Order Book Shares Traded (m)	353.00	1034.00	1183.00	897.00	2985.00	2985.00
Total Equity Turnover (£m)	3248.46	7890.73	18656.69	5740.91	19616.71	19616.71
Total Mkt Bargains	318030.00	674002.00	675108.00	637458.00	1051844.00	1051844.00
Total Shares Traded (m)	3185.00	4836.00	6690.00	4879.00	8043.00	8043.00

† Excluding intra-market and overseas turnover. *UK only total at 6pm. ‡ UK plus intra-market turnover. (u) Unavaliable. (c) Market closed.

All data provided by Morningstar unless otherwise noted. All elements listed are indicative and believed accurate at the time of publication. No offer is made by Morningstar or the FT. The FT does not warrant nor guarantee that the information is reliable or complete. The FT does not accept responsibility and will not be liable for any loss arising from the reliance on or use of the listed information.
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UK RIGHTS OFFERS

Issue price	Amount paid up	Latest renun. date	High	Low	Stock	closing Price p	+or-

There are currently no rights offers by any companies listed on the LSE.

UK COMPANY RESULTS

Company		Turnover		Pre-tax		EPS(p)		Div(p)		Pay day	Total	
Cellular Goods	Pre	**0.029**	0.000	**5.990L**	3.334L	**1.183L**	0.962L	**0.00000**	0.00000	-	**0.000**	0.000
Gfinity	Pre	**5.259**	5.693	**4.191L**	4.068L	**0.400L**	0.400L	**0.00000**	0.00000	-	**0.000**	0.000
Kodal Minerals	Int	**0.000**	0.000	**0.491L**	0.373L	**0.003L**	0.002L	**0.00000**	0.00000	-	**0.000**	0.000
Online Blockchain	Pre	**0.107**	0.065	**1.055L**	0.025	**8.910L**	0.180	**0.00000**	0.00000	-	**0.000**	0.000
Panthera Resources	Int	**0.000**	0.000	**1.437L**	1.945L	**0.000**	0.000	**0.00000**	0.00000	-	**0.000**	0.000
RC365 Holding	Int	**7.924**	2.700	**2.990L**	0.501	**0.028L**	0.000	**0.00000**	0.00000	-	**0.000**	
Rockpool Acquisitions	Int	**0.000**	0.000	**0.078L**	0.013L	**0.600L**	0.100L	**0.00000**	0.00000	-	**0.000**	0.000
Thames Ventures VCT 2	Int			**0.707L**	6.592	**2.400L**	1.100	**0.00000**	0.00000	-	**0.000**	0.000
Walker Crips Group	Int	**16.057**	15.690	**0.145**	0.054	**0.270**	0.100	**0.25000**	0.30000	Jan 20	**1.450**	0.900

Figures in £m. Earnings shown basic. Figures in light text are for corresponding period year earlier.
For more information on dividend payments visit www.ft.com/marketsdata

UK RECENT EQUITY ISSUES

Issue date	Issue price(p)	Sector	Stock code	Stock	Close price(p)	+/-	High	Low	Mkt Cap (£m)
12/15	29.84	AIM	S247	Smarttech247 Group PLC	30.00	0.00	31.46	30.00	3722.4
12/05	0.30		HELD	Hellenic Dynamics PLC	0.15	0.01	0.32	0.13	1816.9

§Placing price. *Intoduction. ‡When issued. Annual report/prospectus available at www.ft.com/ir
For a full explanation of all the other symbols please refer to London Share Service notes.

MARKET DATA

FT500: THE WORLD'S LARGEST COMPANIES

Stock	Price	Day Chg	52 Week High	52 Week Low	Yld	P/E	MCap m
Australia (A$)							
ANZ Bank	24.07	0.06	28.33	20.78	-	-	48438.48
BHP Group	46.16	-0.09	53.72	35.83	8.60	11.22	156574.72
CmwBkAu	104.82	-0.80	109.20	86.98	3.23	20.39	118584.84
CSL	289.00	-1.77	304.70	240.10	1.01	42.81	93378.23
NatAusBk	30.38	-0.14	33.75	25.43	2.86	16.74	64152.35
Telstra	4.04	0.02	4.20	3.62	2.39	34.00	31277.72
Wesfarmers	46.06	-0.40	60.34	40.03	3.73	24.50	34997.75
Westpac Bank	23.50	-0.05	24.67	18.80	3.65	17.69	55254.38
Woolworths	34.06	-0.36	39.63	31.67	3.06	40.19	27762.23
Belgium (€)							
AnBshInBv	56.78	-0.08	58.72	45.56	0.90	29.68	104688.7
KBC Grp	59.94	0.18	81.70	45.53	5.48	10.22	26520.91
Brazil (R$)							
Ambev	14.66	0.24	16.88	12.81	3.80	22.38	45023.88
Bradesco♦	13.36	0.18	17.72	12.03	6.14	6.25	12688.49
Cielo	5.16	0.09	6.22	2.01	2.79	17.65	2733.58
ItauHldFin♦	21.94	0.37	26.04	18.86	3.49	8.77	21212.46
Petrobras	28.26	1.09	42.08	23.61	16.79	4.07	41011.94
Vale	86.28	0.53	107.11	61.90	14.89	3.89	80400.61
Canada (C$)							
Bausch Hlth	8.58	-0.29	36.26	5.10	-	-2.69	2285.4
BCE	59.92	0.08	74.09	55.66	5.59	20.93	40222.53
BkMontrl	122.40	0.31	154.47	113.73	3.54	9.82	63107.94
BkNvaS	66.10	0.28	95.00	63.19	5.38	8.63	57961.76
Brookfield	58.88	11.29	63.88	41.28	1.09	19.91	69948.82
CanadPcR	102.06	-0.17	111.43	86.12	0.71	25.49	69875.21
CanImp	54.61	-0.71	83.75	54.12	10.53	3.95	36418.89
CanNatRs	75.29	2.66	88.18	51.70	2.54	12.17	61366.15
CanNatRy	163.52	0.32	175.39	137.26	1.44	24.78	81206.11
Enbridge	53.57	0.62	59.69	48.42	5.97	19.49	79842.48
GtWesLif	31.08	0.18	41.50	27.99	5.95	9.11	21317.52
ImpOil	65.15	1.37	79.83	44.73	1.51	19.55	28013.36
Manulife	24.29	0.14	28.09	20.81	4.61	7.16	33678.22
Nutrien	100.56	1.03	147.93	85.62	2.21	15.06	38523.86
RylBkC	128.12	0.39	149.60	116.75	3.33	11.87	130670.16
SHOP	45.87	-1.39	185.00	33.00	-	1.66	33777.67
Suncor En	42.50	1.09	53.62	31.33	2.37	16.02	42215.24
ThmReut	153.17	0.37	159.82	119.23	1.28	11.01	53836.44
TntoDom	88.32	0.50	109.08	77.27	3.54	11.54	118428.53
TrnCan	55.13	1.04	74.44	53.53	6.05	30.95	41305.24
China (HK$)							
AgricBkCh	2.61	-	3.15	2.22	8.07	3.46	10280.29
Bk China	2.78	-0.02	3.20	2.51	7.91	3.47	29788.76
BkofComm	4.36	-0.04	5.74	3.84	7.92	3.64	19560.43
BOE Tech	0.64	-0.15	0.86	0.57	-	10.41	16.32
Ch Coms Cons	3.78	-	5.17	3.09	5.32	3.16	2140.13
Ch Evrbrght	2.30	-0.02	3.11	2.04	10.29	3.14	3736.68
Ch Rail Cons	4.67	-0.03	5.95	3.75	5.54	2.51	1242.48
Ch Rail Gp	4.14	-	5.88	3.48	4.91	3.36	2231.98
ChConstBk	4.67	-0.04	6.23	4.12	7.85	3.42	143868.13
China Vanke	16.02	0.06	21.70	9.96	8.78	7.28	3913.65
ChinaCitic	3.40	-0.01	4.08	2.92	8.15	3.18	6483.71
ChinaLife	12.56	0.08	15.04	8.53	5.37	5.54	11975.98
ChinaMBank	41.65	-0.55	70.80	25.40	3.39	7.75	24501.5
ChinaMob	51.90	-0.10	58.65	46.55	6.13	8.08	136067.37
ChinaPcIns	17.38	0.38	25.90	12.10	7.47	5.71	6180.73
ChMinsheng	2.67	-0.01	3.29	2.19	9.10	3.48	2846.62
ChMrchSecs	13.07	-0.06	17.74	12.06	3.37	11.57	13882.93
Chna Utd Coms	4.80	0.26	5.25	3.30	2.35	23.87	21269.63
ChShenEgy	22.50	-	27.65	17.94	9.00	6.88	9737.69
ChShpbldng	3.48	-	4.31	3.36	-	-256.49	10998.62
ChStConEng	5.42	-0.01	6.40	4.67	4.00	4.16	31675.18
ChUncHK	5.00	0.32	5.08	3.27	3.11	11.11	19603.91
CNNC Intl	5.96	-	8.92	5.78	2.11	15.45	16078.64
CSR	3.11	-0.06	3.73	2.37	6.57	8.62	1741.91
Daqin	6.57	-0.01	7.25	5.95	7.37	9.86	13978.79
GuosenSec	8.77	-0.02	11.70	8.43	2.65	9.99	11079.09
HaitongSecs	4.79	-	7.34	3.77	5.93	5.25	2092.73
Hngzh HikVDT	34.63	0.63	53.10	28.10	2.33	18.87	45475.18
Hunng Pwr	3.10	-0.04	5.74	2.62	6.30	-3.51	1867.13
IM Baotou Stl	1.89	0.01	3.06	1.75	-	31.90	8568.37
In&CmBkCh	3.85	-0.03	4.94	3.37	7.80	3.56	42818.11
IndstrlBk	17.25	-0.01	23.22	15.01	4.54	4.69	51286
Kweichow	1771	3.00	2216.96	1359	1.10	39.55	318391.2
Midea	0.39	0.01	0.60	0.32	-	-4.27	15.04
New Ch Life Ins	18.20	-0.02	24.70	12.04	8.32	3.48	2411.66
PetroChina	3.52	-0.03	4.49	3.01	6.70	7.16	9516.66
PingAnIns	50.45	-0.05	69.40	31.30	4.91	8.09	48145.53
PngAnBnk	12.98	0.03	17.56	10.39	1.35	7.69	36048.33
Pwr Cons Corp	6.85	-0.09	9.81	6.65	1.31	14.12	10775.31
SaicMtr	14.67	-0.10	21.01	13.77	4.09	7.28	24529.31
ShenwanHong	0.10	0.00	0.18	0.05	-	2.98	112.84
ShgPdgBk	7.19	-0.05	8.80	6.64	6.46	4.56	30203.39
Sinopec Corp	3.72	-0.02	4.28	3.06	3.70	4.52	12135.81
Sinopec Oil	1.93	-0.02	2.37	1.70	-	636.17	3748
Denmark (kr)							
DanskeBk	137.45	1.15	139.00	91.28	1.39	9.87	16914.15
MollerMrsk	15895	445.00	24070	13185	2.04	2.72	18994.7
NovoB	934.50	1.50	940.00	604.40	0.95	47.24	232419.79
Finland (€)							
Nokia	4.36	0.01	5.71	4.12	-	15.77	26380.41
SampoA	49.73	0.48	49.83	35.85	3.28	11.09	28135.37
France (€)							
Airbus Grpe	111.74	-0.10	120.36	86.52	-	21.46	93477
AirLiquide	133.70	0.06	153.40	114.48	1.96	25.86	74274.62
AXA	26.43	-0.15	29.09	20.34	5.16	9.33	65935.49
BNP Parib	53.80	-0.01	68.07	40.67	4.75	8.12	70480.83
ChristianDior	673.00	-10.50	734.50	513.00	0.99	25.74	128933.94
Cred Agr	9.77	0.02	14.27	8.09	7.82	5.59	31533.22
Danone	49.97	0.24	58.24	46.48	3.70	17.81	35839.78
EDF	12.00	-0.01	12.04	6.64	3.88	9.67	49500.08
Engie SA	13.58	-0.03	14.68	9.79	3.72	10.03	35105.12
EssilorLuxottica	170.05	-1.60	188.64	132.70	0.61	54.34	80792.22
Hermes Intl	1443	-21.50	1585.5	957.60	0.30	64.91	161681.87
LOreal	333.25	-1.45	424.25	300.45	1.15	42.54	189292
LVMH	673.80	-10.20	739.40	535.00	0.99	29.56	359896.83
Orange	9.36	0.06	11.94	9.08	6.12	3255.36	26422.71
PernodRic	184.95	-1.10	213.00	166.60	1.61	29.26	50634.01
Renault	31.40	0.19	38.07	20.47	-	-24.57	9853.75
Safran	117.56	-0.32	120.10	87.85	0.35	1232.19	53308.05
Sanofi	90.98	-0.31	106.08	76.45	3.36	19.28	122390.31
Sant Gbn	46.14	0.52	64.82	35.20	2.81	11.56	25256.91
Schneider	131.18	0.34	173.78	110.02	1.89	24.25	79511.75
SocGen	23.57	0.20	37.68	18.34	2.24	4.17	21260.62
Total	59.21	0.21	60.44	43.60	4.35	11.92	164592.18
UnibailR	48.93	0.17	73.09	39.68	-	-7.30	7205.28
Vinci	94.19	0.43	103.74	80.74	2.72	21.89	59779.69
Vivendi	8.94	-	12.16	7.59	6.40	-16.73	10518.51
Germany (€)							
Allianz	202.20	-0.35	232.50	156.22	4.53	13.39	86552.85
BASF	46.24	0.55	69.15	37.90	6.81	8.02	43862.64
Bayer	48.62	0.07	67.99	45.92	3.92	49.96	50695.67
BMW	83.50	0.20	97.60	67.58	2.17	4.66	53350.24
Continental	56.16	1.02	95.09	44.44	-	9.07	11921.39
Deut Bank	10.71	0.07	14.64	7.46	-	11.04	23484.27
Deut Tlkm	18.87	-0.09	19.86	14.47	3.03	22.73	99856.18
DeutsPost	35.06	0.29	56.91	29.68	3.76	9.30	46099.8
E.ON	9.12	-0.01	12.54	7.28	4.92	5.31	25555.37
Fresenius Med	29.88	0.62	63.66	26.19	4.28	9.46	9292.05
Fresenius SE	26.16	0.28	38.11	19.76	3.29	8.67	15506.71
HenkelKgaA	61.00	0.45	74.75	56.55	2.86	17.00	16819.73
Linde	309.15	2.35	334.70	244.00	1.15	50.34	161616.59
Mercedes-Benz	61.35	0.35	77.90	50.19	2.10	6.43	69660.92
MuenchRkv	303.50	0.80	310.20	205.15	3.08	15.20	45128.45
SAP	97.38	-0.22	125.26	81.35	1.81	22.88	126970.64
Siemens	128.54	-0.02	153.06	93.67	2.60	20.26	115961.58
Volkswgn	148.60	2.75	268.20	145.20	3.08	5.26	46540.38
Hong Kong (HK$)							
AIA	86.70	2.80	92.50	57.25	1.37	22.33	130871.46
BOC Hold	26.40	0.05	32.75	23.55	4.19	13.63	35766.23
Ch OSLnd&Inv	20.55	0.25	27.35	14.58	5.21	5.14	28820.62
ChngKng	48.25	-0.05	57.00	42.90	3.27	11.11	22289.77
Citic Ltd	7.88	-0.16	9.26	7.01	6.09	3.67	29373.31
Citic Secs	15.60	-0.06	21.32	11.82	2.73	8.08	5237.43
CK Hutchison	46.20	-0.20	60.45	38.80	4.39	5.89	22700.15
CNOOC	9.81	-	12.54	7.99	4.11	8.61	56034.78
HangSeng	128.00	-1.20	169.50	110.00	4.25	20.72	31357.55
HK Exc&Clr	340.00	2.60	483.60	208.20	2.40	38.57	55236.01
MTR	40.90	-0.30	43.70	33.45	2.68	29.80	32504.2
SandsCh	25.00	-0.35	27.20	12.50	-	-27.78	25926.21
SHK Props	105.90	0.40	107.60	83.10	4.17	12.17	39322.53
Tencent	320.20	-3.60	488.00	198.60	0.45	12.68	392850.57
India (Rs)							
Bhartiartl	808.65	-7.95	860.55	628.75	-	174.16	58129.37
HDFC Bk	1597.65	-14.40	1722.1	1271.6	-	27.32	107504.61
Hind Unilevr	2621.1	-24.25	2741.6	1927	1.21	70.83	74319.85
HsngDevFin	2623.05	-21.40	2933.8	2026	0.87	22.52	57746.57
ICICI Bk	878.90	-11.75	958.20	642.15	0.23	28.13	73985.97
Infosys	1497.1	-24.95	1923.3	1360	2.01	29.84	76026.3
ITC	326.70	-5.75	361.45	207.00	3.27	27.38	48928.43
L&T	2062.75	-47.20	2211.6	1456.35	0.87	34.51	34981.13
OilNatGas	139.80	-2.45	189.80	119.85	6.46	3.99	21223.94
RelianceIn	2502.2	-75.60	2856.15	2222	0.28	28.88	204306.63
SBI NewA	574.00	-19.40	629.55	430.70	0.69	16.15	61820.16
SunPhrmInds	1001.55	-9.10	1070.95	777.60	0.74	37.65	28999.64
Tata Cons	3228.35	-31.35	3920	2950.1	1.12	31.10	142553.53
Israel (ILS)							
TevaPha	32.56	1.64	37.23	23.83	-	27.60	10343.87
Italy (€)							
Enel	5.10	0.03	7.07	3.96	6.85	24.87	55041.59
ENI	13.48	0.10	14.85	10.43	4.77	5.95	51569.74
Generali	16.80	-0.06	21.55	13.67	8.35	9.89	28191.43
IntSPaolo	2.09	0.01	2.92	1.58	1.67	67.97	43152.53
Unicred	13.28	0.05	15.93	7.75	0.86	20.67	31542.98
Japan (¥)							
AstellasPh	2034	-17.50	2205	1782	2.32	30.53	28107.81
Bridgestne	4774	-24.00	5509	4042	3.57	10.83	25646.94
Canon	2927	-18.50	3516	2538.5	3.43	14.12	29385.97
CntJpRwy	15935	-65.00	17920	14660	0.84	-29.79	24709.15
Denso	6654	-77.00	9575	6549	2.16	18.18	39465.45
EastJpRwy	7425	-41.00	8280	6373	1.38	-7.43	21122.68
Fanuc	20160	5.00	24930	18740	2.30	23.91	30639.77
FastRetail	79090	-260.00	88230	54310	0.68	37.02	63149.16
Fuji Hvy Ind	2039	-32.00	2684	1664.5	2.82	23.36	11805.42
Hitachi	6733	-66.00	7463	4750	1.75	9.84	47543.19
HondaMtr	3045	-42.00	3755	3018	4.35	6.42	41519.01
JapanTob	2825	-1.00	2858.5	2000	4.97	14.34	42529.16
KDDI	4066	-31.00	4636	3321	3.03	13.58	70476.7
Keyence	51360	-740.00	74710	44880	0.40	42.80	94024.44
MitsbCp	4259	-56.00	4845	3607	3.33	9.47	47259.2
MitsubEst	972.25	-5.53	1013.24	876.51	-	-	-
MitsubishiEle	1321.5	-14.50	1518	1225.5	3.11	11.78	21358.88
MitsuiFud	837.14	-23.87	1007.12	684.38	-	-	-
MitUFJFin	898.00	28.50	898.00	620.20	2.97	9.08	86947.91
Mizuho Fin	1842.5	25.50	1860	1436.5	4.35	8.78	35216.93
Murata Mfg	6752	-59.00	9319	6604	1.83	13.51	34346.55
Nippon TT	3805	18.00	4128	3071	2.83	11.94	103739.22
Nissan Mt	412.80	-9.50	643.00	408.60	-	13.07	13114.86
Nomura	483.30	1.30	562.20	460.30	4.89	-32.40	11763.51
Nppn Stl	2226	2.50	2318.5	1787	3.69	3.43	15923.34
Panasonic	1119.5	-25.50	1325	1006.5	2.29	11.03	20679.84
Seven & I	5633	4.00	6083	4936	1.87	20.90	37586.2
ShnEtsuCh	16680	-215.00	20200	14185	1.79	15.58	51596.33
Softbank	5757	-29.00	7180	4210	0.79	4.82	74663.49
Sony	10200	-80.00	14745	9213	0.60	12.70	96823.74
SumitomoF	5350	94.00	5353	3672	3.84	10.15	55360.16
Takeda Ph	4100	30.00	4203	3125	4.51	14.34	48832.45
TokioMarine	2865.5	50.50	2970.5	2037	7.89	4.54	44001.66
Toyota	1818	-23.00	2375.5	1791	2.88	7.99	223264.24
Mexico (Mex$)							
AmerMvl	18.31	0.21	21.45	15.67	1.80	14.62	39894.25
FEMSA UBD	153.15	1.33	169.96	120.63	1.34	123.65	17033.39
WalMrtMex	71.93	-0.72	82.93	64.81	0.71	35.40	64637.22
Netherlands (€)							
ASML Hld	516.90	-5.90	724.50	376.10	0.62	41.82	221164.66
Heineken	89.16	-0.08	100.95	77.50	1.05	16.20	54506.89
ING	11.53	-0.05	14.00	7.90	4.97	9.82	45594.88
Unilever	47.94	0.08	49.09	39.36	2.99	24.61	146398.7
Norway (Kr)							
DNB	193.40	0.45	220.50	168.05	8.98	12.39	30519.51
Equinor	364.00	-1.40	410.95	235.50	1.35	15.73	116973.24
Telenor	89.86	0.56	148.80	87.60	9.99	15.21	12726.34
Qatar (QR)							
QatarNtBk	18.09	-0.08	27.00	17.50	2.78	14.67	45880.94
Saudi Arabia (SR)							
AlRajhiBnk	73.20	-1.50	117.40	71.80	2.92	13.95	77851.64
Natnlcombnk	48.50	-0.50	82.00	45.75	2.66	18.29	57746.09
SaudiBasic	84.80	-	141.40	79.20	3.41	12.39	67641.57
SaudiTelec	35.65	-0.05	48.88	35.05	9.98	7.08	47394.3
Singapore (S$)							
DBS	34.04	-0.23	37.49	29.45	3.22	14.77	64859.26
JardnMt US$	50.71	0.13	62.10	42.60	3.02	9.48	14696.98
OCBC	12.37	0.06	13.54	11.20	3.02	13.06	41154.71
SingTel	2.57	-0.02	2.88	2.31	2.60	45.92	31408.59
UOB	30.90	-0.26	33.33	25.91	2.86	14.55	38310.09
South Africa (R)							
Firstrand	63.44	0.97	79.34	58.86	3.93	11.93	20925.58
MTN Grp	128.99	2.54	211.49	115.46	-	18.27	14291.92
Naspers N	2759.8	-40.20	2941.17	1392.5	0.20	15.42	70675.39
South Korea (KRW)							
HyundMobis	206500	-1500.00	265500	189500	1.86	8.39	15200.15
KoreaElePwr	21900	150.00	25100	16500	5.37	-13.33	10975.88
SK Hynix	77800	-1400.00	134000	77300	1.90	5.80	44217.8
SmsungEl	58100	-1000.00	80800	51800	2.38	10.48	270781.75
Spain (€)							
BBVA	5.67	0.03	6.12	3.97	6.25	8.08	36262.65
BcoSantdr	2.80	-0.01	3.48	2.32	2.61	5.87	49819.92
CaixaBnk	3.67	0.02	3.71	2.30	0.70	25.26	31354.55
Iberdrola	10.88	-0.05	11.49	8.47	3.70	19.56	73465.9
Inditex	24.94	-0.18	28.58	18.55	0.85	27.57	82497.65
Repsol	14.82	0.05	16.23	10.15	3.86	9.47	21665.26
Telefonica	3.38	0.03	5.06	3.22	9.76	2.59	20736.16
Sweden (SKr)							
AtlasCpcoB	111.22	-0.28	133.60	22.08	6.80	7.23	16489.66
Ericsson	61.69	0.78	117.32	58.81	3.77	8.86	18003.32
H & M	112.50	0.42	191.86	98.25	5.79	15.10	15608.65
Investor	189.44	1.12	228.75	158.22	1.91	7.94	32784.26
Nordea Bk	112.46	0.80	113.78	85.25	13.45	12.78	39400.69
SEB	120.55	0.75	126.35	91.64	8.67	9.81	24671.07
SvnskaHn	105.45	0.80	107.45	80.88	4.91	10.08	19479.45
Swedbank	178.50	0.60	185.70	124.50	8.44	9.29	19193.19
Telia Co	26.80	0.20	41.70	26.04	7.73	9.21	10410.69
Volvo	189.50	1.00	218.65	148.24	3.55	12.02	28592.16
Switzerland (SFr)							
ABB	28.17	0.24	33.86	23.84	2.70	14.08	59292.8
CredSuisse	2.85	0.06	8.77	2.65	3.21	-4.66	8081.86
Nestle	107.82	-0.16	128.90	103.42	2.33	19.50	317644.22
Novartis	84.72	0.18	88.42	73.32	3.25	9.59	218161.93
Richemont	116.80	-1.10	139.80	90.28	1.53	29.02	65316.41
Roche	295.20	0.30	404.20	294.05	2.72	20.61	222182.77
Swiss Re	87.46	0.58	102.20	68.18	6.17	22.01	29748.05
Swisscom	508.20	0.60	587.40	443.40	3.95	15.75	28202.63
UBS	17.30	0.19	19.90	13.10	1.83	9.28	65323.48
Zurich Fin	447.10	2.00	461.70	376.20	4.09	15.52	72066.78
Taiwan (NT$)							
Chunghwa Telecom	112.50	-0.50	132.50	105.50	3.76	24.78	28394.74
Formosa PetChem	80.10	-0.90	103.50	75.20	0.73	15.61	24826.08
HonHaiPrc	101.00	-	116.00	99.50	3.92	10.30	45556.01
MediaTek	660.00	-1.00	1200	533.00	5.55	9.50	34346.09
TaiwanSem	455.00	-13.00	650.00	370.00	2.32	18.32	383872.57
Thailand (THB)							
PTT Explor	31.50	-	41.25	30.75	5.94	8.98	25908.35
United Arab Emirates (Dhs)							
Emirtestele	24.30	0.70	38.98	11.60	2.75	27.17	57535.64
United Kingdom (p)							
Anglo American	3249.5	45.50	4292.5	2487.5	5.49	6.43	52420.67
AscBrFd	1587	18.50	2063	1223	0.39	26.23	15084.37
AstraZen	11238	-68.00	11540	8214	1.84	1902.81	210017.46
Aviva	444.00	-2.00	606.58	341.92	4.81	58.42	15010.88
Barclays	157.74	0.60	209.45	132.06	1.90	3.83	30187.37
BP	478.90	1.00	503.30	332.25	3.29	17.38	104086.38
BrAmTob♦	3316.5	-3.00	3645	2717.5	6.50	11.22	89431.92
BT	114.00	-0.35	201.40	110.55	-	11.07	13653.47
Compass	1932	-2.00	1970.5	1494	0.72	47.01	40868.38
Diageo	3647.5	-15.50	4097	3282.5	1.99	28.06	99886.22
GlaxoSmh	1452.8	-2.00	2753.96	1280.92	5.51	16.78	71736.75
Glencore	558.00	1.00	571.80	372.05	1.59	20.43	86332.06
HSBC	510.30	-2.00	567.20	434.70	3.17	11.15	122895.1
Imperial Brands	2082	-8.00	2185	1434.23	6.63	6.96	23560.97
Jardine Mathes.	62.50	-	60.50	46.89	2.45	11.68	18114.01
LlydsBkg	46.03	-0.07	56.00	38.10	5.58	6.39	37349.61
LSE Group	7130	-58.00	8612	6230	1.08	72.90	43721.16
Natl Grid	989.60	-8.00	1271.45	844.29	4.97	23.07	43686.1
Natwest Group	264.50	-0.10	284.42	196.92	3.97	10.41	30828.08
Prudential	1116.5	17.00	1311	782.40	1.05	18.13	37021.17
ReckittB	5710	12.00	6824	5400	3.06	-24.71	49289.12
RELX	2299	-9.00	2474	2056	2.07	30.33	53097.5
RioTinto	5808	69.00	6343	4436.95	8.65	6.07	87535.29
RollsRoyce	91.68	0.58	125.86	64.44	-	62.37	9252.14
Shell PLC	2366.5	14.00	2527	1616.4	2.56	12.47	199965.41
StandCh	625.00	-	641.00	431.30	1.42	14.02	21820.16
Tesco	226.70	0.60	304.10	194.35	4.04	11.54	20122.75
Unilever	4214	1.00	4249.5	3267.5	3.44	21.63	128686.71
Vodafone	83.90	0.17	141.60	83.24	9.22	-187.70	27662.07
WPP	816.60	-0.80	1231.5	713.00	3.25	15.55	10547.27
United States of America ($)							
21stC Fox A	30.60	0.10	44.95	28.02	1.37	13.91	9254.21
3M	119.60	-1.99	179.18	107.07	4.41	13.27	66108.05
AbbottLb	108.05	0.02	142.60	93.25	1.48	30.80	188393.15
Abbvie	163.24	-0.03	175.91	128.60	2.84	28.42	288686.76
Accenture	265.68	0.92	417.37	242.95	1.24	30.30	174920.66
Activision Bli.	75.93	0.23	82.00	63.86	0.55	24.79	59424.74
Adobe	336.32	-0.21	582.88	274.73	-	37.16	156352.84
Advanced Micro	63.84	-0.02	156.73	54.57	-	27.90	102932.82
AEP	95.25	0.78	105.60	80.30	2.80	21.57	48945.52
Aflac	71.60	0.69	72.70	52.07	1.64	12.58	44520.06
AirProd	312.50	-0.10	328.56	216.24	1.71	36.86	69333.12
Allstate	136.08	0.65	144.46	111.85	2.12	9.00	36089.72
Alphabet	89.14	1.38	151.55	83.34	-	0.89	532403.36
Altria	45.66	-0.12	57.05	40.35	6.86	38.27	81830.6
Amazon	84.40	0.61	172.94	82.25	-	1.46	860968.6
AmerAir	12.56	-0.01	21.42	11.65	-	-3.77	8159.51
AmerExpr	146.47	1.16	199.55	130.65	1.13	15.97	109447.17
AmerIntGrp	62.77	0.37	65.73	47.05	1.82	6.51	46633.14
AmerTower	211.50	0.90	291.99	178.17	2.19	41.97	98475.59
Amgen	264.44	-0.82	296.67	214.39	2.37	28.89	141099.69
Amphenol Corp	75.51	-0.55	88.45	61.67	0.92	33.79	44935.59
Analog Devices	162.69	-1.06	180.01	133.48	1.53	61.35	82855.32
Anthem	482.58	12.71	-	-	-	-	-
Aon Cp	301.16	1.01	341.98	246.21	0.59	60.94	62295.83
Apple	130.88	-1.35	182.94	129.04	0.59	24.38	2082054.48
Applied Materi.	96.66	-0.95	167.06	71.12	0.87	14.98	81590.32
Aptiv	90.47	-0.53	166.02	77.96	-	52.37	24512.81
ArcherDan	94.22	0.73	98.88	64.73	1.40	22.09	51758.27
AT&T	18.24	-0.03	21.53	14.46	10.15	7.42	129996.48
Autodesk	187.94	-0.16	285.38	163.20	-	93.34	40551.34
AutomData	240.19	1.03	274.92	192.26	1.42	41.76	99637.48
AutoZone	2424.27	20.41	2610.05	1703.32	-	24.60	45493.05
Avago Tech	550.71	-2.38	677.76	415.07	2.43	34.93	230135.46
BakerHu	28.58	0.22	39.78	20.42	2.31	74.29	28621.94
Bank of NY	44.61	0.13	64.63	36.22	2.59	12.10	36057.37
BankAm	32.51	0.12	50.11	29.31	2.14	10.23	260809.27
Baxter	50.08	-0.06	89.70	49.00	1.93	22.23	25246.72
BectonDick	254.70	1.11	277.29	215.90	1.17	49.49	72403.05
BerkshHat	462464.99	3764.99	544389.26	393012.25	-	8.73	276011.13
Biogen	279.34	-1.27	311.88	187.16	-	30.16	40225.35
BlackRock	705.63	2.30	929.06	503.12	2.08	20.73	105982.5
Boeing	188.21	-0.05	223.23	113.02	-	-29.56	111758.23
Booking Holdings	1957.77	24.78	2715.66	1616.85	-	78.05	75940.7
Bristol-Myers	73.20	-0.63	81.44	61.33	2.45	26.35	155634.94
Broadcom	550.71	-2.38	677.76	415.07	2.43	34.93	230135.46
Cadence Design	160.94	-0.82	194.97	132.32	-	72.30	44148.42
CapOne	89.88	0.39	160.54	86.98	1.98	3.75	34305.16
CardinalHlth	79.92	-0.64	81.57	49.10	2.18	46.50	20949.75
Carnival	7.68	-0.20	23.86	6.11	-	-1.03	8545.59
Caterpillar	239.62	2.08	241.91	160.60	1.59	22.75	124700.49
Centene Corp	82.05	-0.19	98.53	73.20	-	40.41	46461.61
CharlesSch	81.52	0.72	96.24	59.35	0.79	32.35	148027.74
Charter Comms	330.99	7.11	669.87	297.66	-	15.19	51525.97
Chevron Corp	176.95	4.87	189.68	115.41	2.67	24.41	342149.99
Chipotle Mexic.	1406.58	-1.22	1776.67	1196.28	-	68.98	38992.03
Chubb	219.20	1.81	222.00	173.78	1.29	12.77	90979.02
Cigna	335.00	1.72	340.11	213.16	1.06	23.92	102421.04
Cintas Corp	454.23	1.73	470.23	343.86	0.71	44.72	46124.67
Cisco	47.29	-0.04	64.29	38.61	2.81	18.85	194286.7
Citigroup	44.03	0.04	69.11	40.01	4.13	4.88	85279.63
CME Grp	173.25	0.08	256.94	166.58	1.85	26.69	62322.35
Coca-Cola	63.62	0.28	67.20	54.02	2.35	31.75	275103.91
Cognizant	55.58	0.12	93.47	51.33	1.54	15.41	28561.18
ColgtPlm	79.38	0.10	85.18	67.84	2.01	34.96	66299.3
Comcast	34.94	0.12	51.20	28.39	2.55	12.91	150729.91
ConocPhil	116.62	4.42	138.49	70.46	1.49	21.58	145316.81
Constellation	231.75	0.74	261.53	207.59	1.18	-1171.89	37363.78
Corning	31.59	0.02	43.47	28.98	2.71	27.71	26714.95
Corteva	59.40	0.50	68.43	43.74	0.80	28.14	42440.82
Corteva	59.40	0.50	68.43	43.74	0.80	28.14	42440.82
Costco	460.97	2.26	612.27	406.51	0.62	41.32	204608.15
CrownCstl	136.39	0.79	208.69	121.71	3.56	57.37	59063.37
CSX	31.21	0.24	38.63	25.80	1.11	19.36	65616.18
CVS	93.51	0.11	111.25	86.28	1.90	17.65	122869.05
Danaher	260.70	2.03	330.46	233.71	0.31	33.40	189776.24
Deere	436.47	0.61	448.40	283.81	0.80	26.91	130171.62
Delta	32.74	-0.18	46.27	27.20	-	44.12	20990.97
Devon Energy	61.73	1.62	79.40	41.31	2.84	16.55	40352.9
Digital Realty	100.83	0.97	176.53	85.76	4.10	19.06	28990.87
DiscFinServ	96.94	0.08	129.12	87.64	1.73	6.11	26486.51
Disney	87.26	0.59	157.50	84.69	-	56.97	159126.64
Dollar General	247.95	2.42	262.21	183.25	0.61	27.12	55435.37
DominRes	60.47	-0.02	88.78	57.18	3.71	21.29	50388.15
DukeEner	102.80	0.85	116.33	83.76	3.38	23.42	79162.45
DuPont	68.27	0.72	84.08	49.52	1.57	23.74	33915.78
Eaton	156.65	0.54	172.52	122.50	1.73	32.94	62299.67
eBay	40.12	-	67.65	35.92	1.60	118.57	21771.48
Ecolab	144.06	1.01	236.89	131.04	1.21	41.38	41032.33
Edwards Lifesc.	74.04	-0.41	131.73	67.13	-	34.94	45776.01
Eli Lilly	366.92	1.61	375.25	231.87	0.83	67.33	348639.28
Emerson	95.44	0.36	100.00	72.41	1.89	23.40	56443.22
EOG Res	129.80	3.50	150.88	86.04	1.11	18.24	76243.16
Equinix	656.50	1.42	847.10	494.89	1.56	133.32	60751.27
EquityResTP	59.03	0.01	94.32	58.15	3.64	19.35	22308.55
Exelon	42.83	0.31	50.71	29.10	3.18	27.64	42561.97
ExxonMb	108.15	2.27	114.66	60.42	2.87	22.53	445393.43
Fedex	177.54	1.85	260.21	141.92	1.44	10.72	44810.59
Fidelity NIS	67.00	0.42	122.06	56.53	2.07	112.30	39756.42
Fiserv	100.19	0.65	110.94	87.03	-	56.54	63623.46
FordMtr	11.33	0.02	25.87	10.61	0.79	2.86	44749.44
Franklin	26.72	0.13	34.29	20.24	3.77	7.94	13345.71
GenDyn	247.85	1.26	256.86	200.79	1.68	24.10	68045.59
GenElectric	81.88	0.11	101.91	59.93	0.35	-28.29	89467.67
GenMills	85.23	0.06	88.34	61.67	2.15	25.28	50252.52
GenMotors	33.66	0.13	67.21	30.33	-	5.64	47813.55
GileadSci	84.79	-0.49	89.74	57.17	2.98	19.31	106347.34
GoldmSchs	346.52	0.94	391.33	277.84	1.67	6.55	117341.96
Halliburton	38.42	0.88	43.99	22.30	0.61	24.24	34887.16
HCA Hold	239.93	-1.22	279.02	164.47	0.71	12.73	67832.22
Hew-Pack	26.66	-	41.47	24.08	2.80	5.40	26184.01
Hilton Worldwi.	126.65	0.71	167.99	108.41	-	97.42	34253.25
HiltonWwde	126.65	0.71	167.99	108.41	-	97.42	34253.25
HomeDep	316.67	0.55	413.44	264.51	1.87	22.68	324183.45
Honywell	213.83	1.52	220.96	166.63	1.57	30.36	143759.3
HumanaInc	515.07	2.64	571.30	363.73	0.48	25.52	65207.39
IBM	140.84	-0.04	153.21	115.55	4.14	30.36	127337.16
IDEXX Laborato.	410.62	-2.34	664.70	317.06	-	53.62	34006.3
IllinoisTool	221.49	1.30	248.11	173.52	1.90	29.23	68038.71
Illumina	193.43	-2.35	389.89	173.45	-	43.10	30426.85
Intcntl Exch♦	102.97	0.51	138.46	88.60	1.14	16.11	57514.06
Intel	25.92	-0.06	53.13	24.59	4.78	5.99	106951.21
Intuit	383.39	-0.56	658.84	339.36	0.60	53.92	107704.67
John&John	177.08	0.05	186.69	155.72	2.11	25.46	462972.76
JohnsonCn	64.12	-0.01	81.69	45.52	1.60	32.88	44031.45
JPMrgnCh	130.98	0.32	160.24	101.28	2.58	9.58	384191.18
Kimb-Clark	137.57	0.13	144.53	108.74	3.05	28.99	46428.79
KinderM	18.08	0.34	20.20	15.49	5.47	43.85	40627.94
KLA Corp	374.41	0.56	442.44	250.20	0.93	21.64	53060.76
Kraft Heinz	40.53	0.17	44.87	32.73	3.52	55.50	49640.29
Kroger	45.88	0.63	62.78	41.82	1.53	23.52	32838.33
LasVegasSd	46.26	-0.27	49.73	28.88	-	-34.40	35346.51
LibertyGbl	18.95	-0.01	29.08	15.22	-	0.91	3257.55
Lilly (E)	366.92	1.61	375.25	231.87	0.83	67.33	348639.28
Linde	328.83	1.17	347.60	262.47	1.15	50.45	161968.75
Lockheed	481.83	2.53	498.95	343.78	2.05	23.23	126275.1
Lowes	200.51	1.36	259.25	170.12	1.34	18.53	124456.67
Lyondell	82.16	0.68	117.22	71.46	4.81	5.50	26753.3
Marathon Ptl	114.77	3.12	127.62	62.17	1.80	63.81	53788.2
Marsh&M	166.09	0.39	183.14	142.80	1.44	28.69	82382.22
MasterCard	342.84	1.32	399.92	276.87	0.58	43.95	327001.83
McDonald's	267.43	1.66	281.67	217.68	1.75	29.91	195868.46
McKesson	384.09	2.30	401.78	236.84	0.41	48.85	54461.46
Medtronic	77.34	0.20	114.31	75.77	2.87	23.70	102876.12
Merck	111.69	0.45	112.17	72.88	2.10	25.81	283178.38
Meta	117.04	-0.08	352.71	88.09	-	9.55	263962.27
Metlife	72.13	0.33	77.36	57.41	2.35	11.08	56593.65
Microsoft	237.94	-0.25	344.30	213.43	0.86	28.46	1774200.2
Mnstr Bvrg	101.27	0.46	104.65	71.78	-	44.25	52834.37
MondelezInt	67.04	0.31	69.47	54.72	1.77	24.77	91551.06
Monsanto	10.06	0.01	11.13	9.56	-	51.79	251.50
MorganStly	86.19	-0.18	109.73	72.05	2.17	12.05	145670.53
Netflix	294.77	-2.98	620.61	162.71	-	29.45	131177.8
NextEraE	83.78	0.44	92.91	67.22	1.73	123.60	166484.57
Nike	116.47	-0.24	170.12	82.22	0.90	34.19	147177.62
NorfolkS	247.29	1.84	296.87	203.65	1.50	22.93	57251.15
Northrop	533.60	2.23	556.27	364.62	1.03	13.76	82127.53
NXP	156.34	-1.17	234.42	132.08	1.28	25.86	40513.14
Occid Pet	63.20	1.40	77.13	28.20	0.06	34.46	57445.83
Oracle	80.48	-0.01	90.36	60.78	1.43	34.17	216994.17
Pepsico	182.02	0.93	186.84	153.37	2.08	37.23	250770.63
Perrigo	32.74	0.79	43.90	30.78	2.61	-37.52	4408.11
Pfizer	51.78	0.14	60.08	41.45	2.68	14.80	290657.43
Phillips66	103.21	2.68	113.53	70.66	3.12	39.03	48780.37
PhilMorris	101.30	0.44	112.48	82.85	4.31	19.51	157035.49
PNCFin	155.17	0.88	214.50	143.52	2.75	13.72	62583.01
PPG Inds	126.20	0.34	172.78	107.06	1.68	31.10	29659.28
ProctGmbl	152.66	0.47	165.35	122.18	2.09	29.14	364170.35
Prudntl	99.30	0.60	124.22	85.46	4.12	5.72	36939.6
PublStor	282.51	2.52	421.76	270.73	2.52	32.14	49619.6
Qualcomm	109.79	-0.89	192.10	101.93	2.18	14.12	123074.59
Raytheon	98.92	0.41	106.02	80.27	1.80	43.06	145418.41
Regen Pharm	727.02	-6.61	779.00	538.01	-	11.34	77851.52
S&P Global	331.48	-0.64	481.44	279.32	0.83	29.76	107994.56
Salesforce	128.61	-0.58	260.78	126.34	-	96.67	128610
Schlmbrg	52.43	1.04	56.04	28.96	0.85	44.61	74345.41
Sempra Energy	156.83	-0.21	176.47	128.66	2.50	43.92	49296.9
Shrwin-Will	242.29	0.99	354.15	195.24	0.81	38.98	62787.86
SimonProp	116.82	0.46	161.87	86.02	5.45	19.18	38193.81
SouthCpr	60.89	0.03	79.32	42.42	4.68	15.58	47073.97
Starbucks	97.73	-0.03	117.34	68.39	1.68	29.66	112174.49
StateSt	77.54	-0.32	103.76	58.62	2.50	12.11	28450.7
Stryker	241.50	-0.27	279.28	188.84	0.95	52.06	91390.83
Sychrony Fin	32.33	-0.01	47.11	27.22	2.49	4.78	14566
T-MobileUS	139.98	0.45	154.38	101.51	-	65.23	174156.7
Target	141.10	-0.25	254.87	137.16	2.01	11.13	64943.06
TE Connect	113.48	-0.75	164.12	104.76	1.55	17.32	35999.32
Tesla Mtrs	122.96	-2.39	384.29	121.02	-	28.18	388289.87
TexasInstr	163.61	-1.09	193.28	144.46	2.29	22.24	148487.81
TheTrvelers	189.43	2.23	191.16	149.65	1.70	13.11	44392.45
ThrmoFshr	541.76	2.62	668.94	475.77	0.17	31.27	212475.86
TJX Cos	79.11	0.69	81.17	53.69	1.18	32.59	91406.16
Truist Financial Corp	42.57	0.09	66.10	40.01	3.89	10.69	56473.81
Twitter	53.70	0.35	60.16	31.30	-	-224.30	41093.72
UnionPac	210.10	1.44	278.94	183.70	1.96	21.80	129167.07
UPS	176.22	0.61	233.72	154.87	2.06	13.48	128609.04
USBancorp	43.10	0.25	60.50	38.39	3.64	9.49	64038.99
UtdHlthcre	528.63	1.54	558.10	445.74	0.94	32.84	493924.95
ValeroEngy	123.49	3.87	146.81	70.50	2.83	61.09	47608.27
Verizon	38.35	0.04	55.51	34.55	5.89	8.09	161042
VertexPharm	290.40	-3.52	324.75	220.24	-	36.20	74543.2
VF Cp	25.97	-0.24	73.66	25.05	6.75	9.56	10091.06
Visa Inc	205.12	0.06	235.85	174.60	0.58	38.14	333897.15
Walgreen	38.56	0.12	53.46	30.39	4.43	6.27	33251.61
WalMartSto♦	143.43	-0.05	160.77	117.27	1.38	32.76	386797.18
Walt Disney	87.26	0.59	157.50	84.69	-	56.97	159126.64
Waste Manage.	158.48	0.75	175.98	138.58	1.29	41.49	65052.41
WellsFargo	40.90	0.22	60.30	36.54	1.68	9.28	155860.51
Williams Cos	33.30	0.73	37.97	25.62	4.39	30.15	40564.62
Workday	164.39	-1.22	280.91	128.72	-	1523.97	33206.78
Yum!Brnds	128.63	-0.19	139.85	103.97	1.38	27.73	36233.51
Zoetis	145.37	0.34	249.27	124.15	0.61	38.23	67750.56
Zoom	65.95	0.01	193.41	64.83	-	16.30	16551.81
Venezuela (VEF)							
Bco de Vnzla	2.24	0.04	2.30	0.32	144.26	-	497.18
Bco Provncl	4.10	-0.09	4.39	1.70	-	0.00	93.57

Closing prices and highs & lows are in traded currency (with variations for that country indicated by stock), market capitalisation is in USD. Highs & lows are based on intraday trading over a rolling 52 week period.
♦ ex-dividend
■ ex-capital redistribution
price at time of suspension

FT 500: TOP 20

	Close price	Prev price	Day change	Day change %	Week change	Week change %	Month change %
MitUFJFin	898.00	869.50	28.50	3.28	136.30	17.9	21.86
SumitomoF	5350.00	5256.00	94.00	1.79	661.00	14.1	14.54
Petrobras	27.60	27.17	0.43	1.58	2.69	10.8	2.03
Deut Bank	10.70	10.64	0.07	0.62	0.99	10.2	10.12
Nike	116.47	116.71	-0.24	-0.21	10.52	9.9	9.77
Cielo	5.16	5.07	0.09	1.78	0.42	8.9	7.74
Mizuho Fin	1842.50	1817.00	25.50	1.40	147.00	8.7	10.88
Charter Comms	330.99	323.88	7.11	2.20	26.03	8.5	-16.12
Bradesco	13.36	13.18	0.18	1.37	1.03	8.4	1.98
ChUncHK	5.00	4.68	0.32	6.84	0.36	7.8	24.14
MollerMrsk	15895.00	15450.00	445.00	2.88	1135.00	7.7	6.36
ItauHldFin	21.96	21.57	0.39	1.81	1.50	7.3	-1.52
Halliburton	38.42	37.54	0.88	2.34	2.57	7.2	-0.72
Total	59.28	59.00	0.28	0.47	3.62	6.5	2.08
Schlmbrg	52.43	51.39	1.04	2.02	3.05	6.2	-4.22
Firstrand	63.44	62.47	0.97	1.55	3.62	6.1	-4.75
Repsol	14.82	14.77	0.05	0.34	0.83	5.9	3.49
DanskeBk	137.45	136.30	1.15	0.84	7.40	5.7	8.66
Prudential	1116.50	1099.50	17.00	1.55	60.00	5.7	18.06
KBC Grp	60.00	59.76	0.24	0.40	3.20	5.6	14.46

Based on the FT Global 500 companies in local currency

FT 500: BOTTOM 20

	Close price	Prev price	Day change	Day change %	Week change	Week change %	Month change %
BOE Tech	0.64	0.79	-0.15	-18.99	-0.15	-19.0	-15.07
Tesla Mtrs	122.96	125.35	-2.39	-1.90	-27.27	-18.1	-37.39
Bausch Hlth	8.72	8.87	-0.15	-1.69	-1.82	-17.3	-3.21
Volkswgn	149.55	145.85	3.70	2.54	-21.55	-12.6	-12.59
Nissan Mt	412.80	422.30	-9.50	-2.25	-51.50	-11.1	-18.28
MitsuiFud	837.14	861.01	-23.87	-2.77	-98.52	-10.5	-10.44
Fuji Hvy Ind	2039.00	2071.00	-32.00	-1.55	-229.50	-10.1	-13.67
Panasonic	1119.50	1145.00	-25.50	-2.23	-117.00	-9.5	-14.08
Carnival	7.68	7.88	-0.20	-2.54	-0.77	-9.1	-25.94
Denso	6654.00	6731.00	-77.00	-1.14	-658.00	-9.0	-13.68
Keyence	51360.00	52100.00	-740.00	-1.42	-4980.00	-8.8	-13.31
Softbank	5757.00	5786.00	-29.00	-0.50	-534.00	-8.5	-5.22
Toyota	1818.00	1841.00	-23.00	-1.25	-160.50	-8.1	-11.27
Murata Mfg	6752.00	6811.00	-59.00	-0.87	-574.00	-7.8	-10.95
HondaMtr	3045.00	3087.00	-42.00	-1.36	-255.00	-7.7	-9.79
Applied Materi.	96.66	97.60	-0.95	-0.97	-8.08	-7.7	-12.60
Sony	10200.00	10280.00	-80.00	-0.78	-845.00	-7.7	-10.75
SHOP	46.05	47.26	-1.21	-2.56	-3.66	-7.4	-6.11
GenMotors	33.66	33.53	0.13	0.37	-2.50	-6.9	-18.13
SBI NewA	574.00	593.40	-19.40	-3.27	-41.95	-6.8	-4.19

Based on the FT Global 500 companies in local currency

BONDS: HIGH YIELD & EMERGING MARKET

Dec 23	Red date	Coupon	Ratings S*	Ratings M*	Ratings F*	Bid price	Bid yield	Day's chge yield	Mth's chge yield	Spread vs US
High Yield US$										
HCA Inc.	04/24	8.36	BB-	Ba2	BB	113.75	4.24	0.00	0.12	-
High Yield Euro										
Aldesa Financial Services S.A.	04/21	7.25	-	-	B	71.10	28.23	0.00	0.64	25.98
Emerging US$										
Peru	03/19	7.13	BBB+	A3	BBB+	104.40	2.60	-	-	0.34
Colombia	01/26	4.50	-	Baa2	BBB-	109.50	2.33	0.16	0.52	1.28
Brazil	04/26	6.00	-	Ba2	BB-	115.15	2.78	-0.01	0.65	1.73
Poland	04/26	3.25	-	A2	A-	111.22	0.98	0.03	0.16	-0.07
Mexico	05/26	11.50	-	Baa1	BBB-	149.00	1.61	0.00	-0.12	0.56
Turkey	03/27	6.00	-	Ba2	BB+	101.26	5.82	0.00	0.17	3.07
Turkey	03/27	6.00	-	B2	BB-	102.88	5.43	0.14	0.83	4.38
Peru	08/27	4.13	BBB+	A3	BBB+	103.50	3.66	0.01	-0.02	0.80
Russia	06/28	12.75	-	Baa3	BBB	168.12	2.48	0.07	0.05	-
Brazil	02/47	5.63	-	Ba2	BB-	101.48	5.52	0.08	0.80	-
Emerging Euro										
Brazil	04/21	2.88	BB-	Ba2	BB-	103.09	0.05	0.01	-0.09	-1.19
Mexico	04/23	2.75	BBB+	A3	BBB+	107.76	0.76	0.00	-0.07	-1.56
Mexico	04/23	2.75	-	Baa1	BBB-	106.48	-0.26	-	-	-0.36
Bulgaria	03/28	3.00	BBB-	Baa2	BBB	117.04	1.00	0.02	-0.15	-1.42

Interactive Data Pricing and Reference Data LLC, an ICE Data Services company. US $ denominated bonds NY close; all other London close. *S - Standard & Poor's, M - Moody's, F - Fitch.

BONDS: GLOBAL INVESTMENT GRADE

Dec 23	Red date	Coupon	Ratings S*	Ratings M*	Ratings F*	Bid price	Bid yield	Day's chge yield	Mth's chge yield	Spread vs US
US$										
FleetBoston Financial Corp.	01/28	6.88	BBB+	Baa1	A-	129.00	2.54	-0.01	-0.05	-
The Goldman Sachs Group, Inc.	02/28	5.00	BBB+	A3	A	117.21	2.47	0.00	0.32	-
NationsBank Corp.	03/28	6.80	BBB+	Baa1	A-	127.69	2.72	-0.01	0.06	-
GTE LLC	04/28	6.94	BBB+	Baa2	A-	128.27	2.80	0.00	-0.11	-
United Utilities PLC	08/28	6.88	BBB	Baa1	A-	130.43	2.62	-0.07	-0.22	-
Barclays Bank plc	01/29	4.50	A	A1	A+	96.46	5.02	0.00	0.02	-
Euro										
Electricite de France (EDF)	04/30	4.63	A-	A3	A-	137.45	0.82	-0.01	0.10	-
The Goldman Sachs Group, Inc.	02/31	3.00	BBB+	A3	A	124.42	0.68	0.00	-0.11	-
The Goldman Sachs Group, Inc.	02/31	3.00	BBB+	A3	A	121.70	0.93	0.00	0.02	-
Finland	04/31	0.75	AA+	Aa1	AA+	111.08	-0.27	0.00	-0.05	-0.87
Yen										
Mexico	06/26	1.09	-	Baa1	BBB-	98.73	1.34	-0.02	-0.14	0.27
£ Sterling										
innogy Fin B.V.	06/30	6.25	BBB	Baa2	A-	137.45	2.19	-0.03	0.02	-
innogy Fin B.V.	06/30	6.25	BBB	Baa2	A-	128.68	3.20	0.00	-0.01	0.40

Interactive Data Pricing and Reference Data LLC, an ICE Data Services company. US $ denominated bonds NY close; all other London close. *S - Standard & Poor's, M - Moody's, F - Fitch.

INTEREST RATES: OFFICIAL

Dec 23	Rate	Current	Since	Last
US	Fed Funds	4.25-4.50	15-12-2022	3.00-3.25
US	Prime	6.25	22-09-2022	5.50
US	Discount	3.25	22-09-2022	2.50
Euro	Repo	0.53	01-11-2022	0.374
UK	Repo	3.50	15-12-2022	3.00
Japan	O'night Call	0.00-0.10	01-02-2016	0.00
Switzerland	Libor Target	-1.25-0.25	15-01-2015	-0.75--0.25

INTEREST RATES: MARKET

Dec 23 (Libor: Dec 22)	Over night	Change Day	Change Week	Change Month	One month	Three month	Six month	One year
US$ Libor	4.31500	-0.006	0.499	0.003	4.38871	4.72386	5.14857	5.41586
Euro Libor	-0.64957	-0.064	0.000	0.001	-0.61943	-0.58057	-0.55600	-0.48571
£ Libor	0.18063	-0.005	0.000	0.002	3.46230	3.80350	4.31170	0.81363
Swiss Fr Libor				-0.002	-0.77540	-0.75300	-0.70280	-0.55320
Yen Libor				0.000	-0.06005	-0.03480	0.05282	0.04867
Euro Euribor				-0.019	1.89400	2.12500	2.69600	3.19200
Sterling CDs				0.000	0.50000	0.63000	0.78500	
US$ CDs				0.000	4.31000	4.66000	5.03000	
Euro CDs				-0.020	1.75000	2.12000	2.58000	

Dec 23	Short term		7 Days notice		One month		Three month		Six month		One year	
Euro	1.64	1.94	1.11	1.41	1.60	1.90	1.97	2.27	2.43	2.73	2.86	3.16
Sterling					0.45	0.55	0.58	0.68	0.71	0.86	0.90	1.05
US Dollar	4.13	4.33	4.15	4.35	4.21	4.41	4.56	4.76	4.93	5.13	5.10	5.30
Japanese Yen	-0.15	0.05	-0.20	0.00	-0.20	0.00	-0.15	0.05	-0.10	0.20	-0.05	0.25

Libor rates come from ICE (see www.theice.com) and are fixed at 11am UK time. Other data sources: US $, Euro & CDs: Tullett Prebon; SDR, US Discount: IMF; EONIA: ECB; Swiss Libor: SNB; EURONIA, RONIA & SONIA: WMBA.

BOND INDICES

	Index	Day's change	Month's change	Year change	Return 1 month	Return 1 year
Markit IBoxx						
ABF Pan-Asia unhedged	203.30	0.22	3.03	-7.50	4.93	-7.26
Corporates(£)	323.90	0.01	-1.42	-18.17	-1.52	-18.44
Corporates(€)	208.63	-0.17	-1.12	-13.62	-0.56	-14.00
Eurozone Sov(€)	210.60	-0.31	-3.16	-17.23	-2.58	-18.03
Gilts(£)	271.37	0.02	-3.75	-24.51	-4.72	-25.00
Overall(£)	280.00	0.02	-3.12	-22.65	-3.88	-23.09
Overall(€)	206.58	-0.27	-2.51	-16.26	-1.99	-16.93
FTSE						
Sterling Corporate (£)	-	-	-	-	-	-
Euro Corporate (€)	104.47	-0.05	-	-	0.54	-1.73
Euro Emerging Mkts (€)	746.44	1.66	-	-	17.58	-2.89
Eurozone Govt Bond	110.04	-0.19	-	-	-0.34	-0.64

CREDIT INDICES

	Index	Day's change	Week's change	Month's change	Series high	Series low
Markit iTraxx						
Crossover 5Y	477.40	-8.02	-27.10	26.68	688.92	426.04
Europe 5Y	93.05	-2.10	-3.50	3.39	142.08	81.55
Japan 5Y	89.83	2.08	9.87	6.19	119.29	75.61
Senior Financials 5Y	102.88	-2.01	-3.24	3.99	155.06	89.99
Markit CDX						
Emerging Markets 5Y	241.86	5.26	9.01	6.45	335.29	222.68
Nth Amer High Yld 5Y	485.26	7.60	11.29	28.65	625.47	450.15
Nth Amer Inv Grade 5Y	82.67	1.42	2.18	5.19	110.98	75.62

Websites: markit.com, ftse.com. All indices shown are unhedged. Currencies are shown in brackets after the index names.

VOLATILITY INDICES

	Dec 23	Day Chng	Prev	52 wk high	52 wk low
VIX	21.13	-0.84	21.97	38.93	16.62
VXD	18.35	-0.74	19.09	45.37	3.27
VXN	26.98	-0.37	27.35	44.05	9.94
VDAX	20.07	-0.17	20.24	93.30	-

† CBOE. VIX: S&P 500 index Options Volatility, VXD: DJIA Index Options Volatility, VXN: NASDAQ Index Options Volatility. ‡ Deutsche Borse. VDAX: DAX Index Options Volatility.

BONDS: BENCHMARK GOVERNMENT

	Red Date	Coupon	Bid Price	Bid Yield	Day chg yield	Wk chg yield	Month chg yld	Year chg yld
Australia	-	-	-	-	-	-	-	-
	05/32	1.25	80.08	3.79	0.07	0.34	0.27	-
	02/50	1.00	96.40	1.64	0.06	0.30	0.21	1.60
Austria	02/29	0.50	86.94	2.84	0.04	0.28	0.49	3.04
	02/47	1.50	76.45	2.86	0.04	0.31	0.35	2.43
Belgium	06/27	0.80	92.30	2.64	0.05	0.25	0.44	3.04
	06/47	1.60	73.93	3.14	0.04	0.29	0.42	2.39
Canada	03/25	1.25	94.97	3.68	0.07	0.12	-0.14	2.53
	06/30	1.25	88.26	3.03	0.06	0.27	0.05	1.69
	12/48	2.75	93.58	3.11	0.04	0.24	0.05	1.39
Denmark	11/29	0.50	87.07	2.57	0.05	0.23	0.42	2.73
	11/52	0.25	56.88	2.25	0.05	0.34	0.40	2.01
Finland	09/24	0.00	95.62	2.64	0.05	0.20	0.41	3.28
	09/29	0.50	85.89	2.84	0.05	0.24	0.43	3.05
France	05/28	0.75	90.35	2.69	0.05	0.28	0.47	2.97
	05/48	2.00	81.02	3.09	0.04	0.31	0.45	2.41
Germany	08/29	0.00	85.85	2.33	0.05	0.25	0.43	2.75
	08/50	0.00	55.34	2.16	0.05	0.34	0.42	2.12
Greece	01/23	3.50	100.18	1.58	-0.02	0.13	0.22	1.85
	01/28	3.75	100.08	3.73	0.02	0.34	0.41	3.05
Ireland	-	-	-	-	-	-	-	-
	05/26	1.00	95.17	2.51	0.06	0.25	0.39	2.91
	02/45	2.00	82.44	3.11	0.05	0.32	0.45	2.50
Italy	02/25	0.35	94.25	3.21	0.02	0.17	0.47	3.23
	05/30	0.40	87.85	2.19	0.03	0.30	0.80	2.96
	03/48	3.45	84.53	4.48	0.05	0.31	0.62	2.68
Japan	04/25	0.05	99.88	0.10	0.00	0.02	0.02	0.01
	12/29	0.10	98.17	0.37	-0.04	0.14	0.14	0.42
	12/49	0.40	77.08	1.43	0.00	0.09	0.02	0.77
Netherlands	07/27	0.75	92.50	2.52	0.04	0.25	0.45	2.97
	01/47	2.75	104.67	2.49	0.05	0.32	0.44	2.41
New Zealand	05/31	1.50	80.37	4.31	-0.02	0.03	0.18	2.05
	09/40	2.50	122.52	2.22	0.00	0.09	-0.04	1.57
Norway	08/30	1.38	88.41	3.10	0.02	0.19	-0.06	1.48
Poland	01/23	2.50	99.61	7.52	0.51	0.84	0.23	4.36
	07/27	2.50	83.46	6.82	0.12	0.14	-0.04	3.09
	04/47	4.00	67.41	6.77	0.00	-0.44	-0.78	3.47
Portugal	04/27	4.13	105.32	2.79	0.04	0.24	0.48	2.99
Spain	-	-	-	-	-	-	-	-
	10/29	0.60	84.75	3.11	0.03	0.25	0.47	2.92
	10/46	2.90	88.90	3.60	0.04	0.29	0.43	2.48
Sweden	06/30	0.13	115.21	0.00	0.00	0.25	0.25	2.12
	03/39	3.50	118.82	2.12	0.07	0.36	0.30	1.71
Switzerland	04/28	4.00	113.27	1.38	0.03	0.30	0.39	1.76
	06/29	0.00	91.37	1.40	0.01	0.27	0.41	1.71
United Kingdom	07/23	0.75	98.54	3.31	-0.02	0.15	0.12	2.80
	07/27	1.25	90.15	3.60	0.03	0.38	0.32	2.92
	07/47	1.50	61.92	3.93	0.01	0.22	0.42	2.80
United States	-	-	-	-	-	-	-	-
	03/25	0.50	92.21	4.13	0.05	0.03	-0.10	3.12
	02/30	1.50	86.37	3.69	0.00	0.20	-0.01	2.31
	02/50	0.25	69.76	1.63	0.04	0.17	-0.01	-

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GILTS: UK CASH MARKET

Dec 23	Price £	Red Yield	Change in Yield Day	Change in Yield Week	Change in Yield Month	Change in Yield Year	52 Week High	52 Week Low	Amnt £m
	-	-	-	-	-	-	-	-	-
Tr 0.75pc '23	98.60	3.26	0.31	-1.21	3.82	526.92	100.39	97.34	34.36
Tr 0.125pc '24	96.23	3.67	0.27	-1.87	10.54	456.06	98.92	94.34	35.55
Tr 2pc '25	95.96	3.59	1.13	0.56	13.97	420.29	104.83	93.15	39.93
Tr 0.125pc '26	90.12	3.53	1.15	1.15	12.78	404.29	97.75	86.33	35.32
Tr 1.25pc '27	90.07	3.63	1.11	1.40	11.01	404.17	102.97	85.65	40.99
Tr 0.875pc '29	83.84	3.57	1.13	1.13	12.62	340.74	100.56	78.21	43.62
Tr 4.25pc '32	105.06	3.61	0.84	0.00	16.08	280.00	132.83	98.13	40.33
Tr 4.25pc '36	104.13	3.85	0.79	0.52	13.57	259.81	142.01	94.91	31.68
Tr 4.5pc '42	106.97	3.99	0.76	-0.25	15.32	246.96	162.78	93.79	28.35
Tr 3.75pc '52	97.41	3.90	0.78	-0.51	17.12	251.35	168.83	82.51	25.11
Tr 4pc '60	105.47	3.73	0.81	-0.53	18.79	273.00	195.53	87.32	25.13

Gilts benchmarks & non-rump undated stocks. Closing mid-price in pounds per £100 nominal of stock.

GILTS: UK FTSE ACTUARIES INDICES

Price Indices

Fixed Coupon	Dec 23	Day's chg %	Total Return	Return 1 month	Return 1 year	Yield
1 Up to 5 Years	81.29	-0.03	2338.23	-0.82	-4.67	3.62
2 5 - 10 Years	146.64	-0.19	3120.82	-3.36	-15.13	3.60
3 10 - 15 Years	156.80	-0.32	3602.70	-6.05	-22.93	3.85
4 5 - 15 Years	148.12	-0.23	3235.36	-4.16	-17.58	3.70
5 Over 15 Years	216.10	-0.43	3720.79	-11.66	-39.74	3.85
7 All stocks	135.50	-0.22	3026.46	-5.78	-23.74	3.79

Index Linked	Dec 23	Day's chg %	Month chg %	Year's chg %	Total Return	Return 1 month	Return 1 year
1 Up to 5 Years	323.94	0.06	-0.83	2.11	2739.19	-0.83	3.29
2 Over 5 years	545.13	-0.29	-9.35	-38.43	4155.09	-9.35	-38.16
3 5-15 years	447.63	-0.11	-4.82	-16.81	3620.29	-4.82	-16.18
4 Over 15 years	619.95	-0.41	-12.17	-47.16	4587.56	-12.17	-46.99
5 All stocks	516.24	-0.23	-8.04	-34.20	4014.24	-8.04	-33.85

Yield Indices	Dec 23	Dec 22	Yr ago		Dec 23	Dec 22	Yr ago
5 Yrs	3.53	3.49	0.69	20 Yrs	3.97	3.94	1.19
10 Yrs	3.73	3.70	0.95	45 Yrs	3.63	3.61	0.90
15 Yrs	3.92	3.89	1.13				

Real yield	inflation 0% Dec 23	Dur yrs	Previous	Yr ago	inflation 5% Dec 23	Dur yrs	Previous	Yr ago
Up to 5 yrs	0.14	2.73	0.16	-3.55	-0.24	2.75	-0.25	-4.02
Over 5 yrs	0.42	19.80	0.41	-2.36	0.39	19.86	0.37	-2.39
5-15 yrs	0.32	9.63	0.31	-2.86	0.23	9.64	0.21	-2.96
Over 15 yrs	0.44	26.54	0.43	-2.30	0.43	26.56	0.41	-2.32
All stocks	0.41	16.99	0.40	-2.38	0.37	17.08	0.35	-2.41

See FTSE website for more details www.ftse.com/products/indices/gilts
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COMMODITIES

www.ft.com/commodities

Energy		Price*	Change
Crude Oil†	Jan	78.24	-0.05
Brent Crude Oil‡		83.45	2.47
RBOB Gasoline†	Jan	2.30	0.05
Natural Gas†	Jan	5.02	0.03
Base Metals (♠ LME 3 Months)			
Aluminium		2369.00	-23.00
Aluminium Alloy		2000.00	325.00
Copper		8296.50	39.00
Lead		2252.50	57.00
Nickel		29680.00	350.00
Tin		24035.00	145.00
Zinc		2964.00	35.00
Precious Metals (PM London Fix)			
Gold		1800.70	-16.85
Silver (US cents)		2373.50	-15.50
Platinum		984.00	-13.00
Palladium		1692.00	-8.00
Bulk Commodities			
Iron Ore		109.98	-0.76
Baltic Dry Index		1515.00	-135.00
Richards Bay ICE Futures		208.85	3.25

Agricultural & Cattle Futures		Price*	Change
Corn♦	Mar	664.50	4.00
Wheat♦	Mar	768.50	6.25
Soybeans♦	Jan	1475.25	7.50
Soybeans Meal♦	Jan	452.20	0.20
Cocoa (ICE Liffe)✠	Mar	2063.00	13.00
Cocoa (ICE US)♥	Mar	2623.00	17.00
Coffee(Robusta)✠	Jan	1966.00	9.00
Coffee (Arabica)♥	Mar	171.20	2.30
White Sugar✠		571.50	0.20
Sugar 11♥		20.90	0.01
Cotton♥	Mar	84.90	0.60
Orange Juice♥	Jan	210.50	-0.10
Live Cattle♣	Feb	155.88	-0.25
Feeder Cattle♣	May	134.88	-
Lean Hogs♣	Feb	88.73	0.33

	Dec 22	% Chg Month	% Chg Year
S&P GSCI Spt	605.06	-1.63	8.33
DJ UBS Spot	112.53	-3.41	13.78
TR/CC CRB TR	296.59	-1.65	21.22
LEBA EUA Carbon	58.91	-1.98	129.94
LEBA UK Power	1048.00	-37.43	-39.60

Sources: † NYMEX, ‡ ECX/ICE, ♦ CBOT, ✠ ICE Liffe, ♥ ICE Futures, ♣ CME, ♠ LME/London Metal Exchange.* Latest prices, $ unless otherwise stated.

BONDS: INDEX-LINKED

	Price Dec 22	Yield Dec 22	Yield Prev	Month return	Value stock	Market	No of stocks
Can 4.25%' 26	111.27	1.302	1.243	0.86	5.25	73735.00	8
Fr 0.25%' 24	101.05	-0.409	-0.495	-0.84	17.92	248864.94	17
Swe 1.00%' 25	125.80	-0.216	-0.212	0.16	35.38	218463.51	6
UK 0.125%' 24	102.25	-1.651	-1.618	-0.02	15.24	570754.72	31
UK 2.50%' 24	376.59	-0.488	-0.328	-0.13	6.82	570754.72	31
UK 2.00%' 35	242.77	0.307	0.342	-4.20	9.08	570754.72	31
US 0.625%' 24	97.84	2.697	2.612	0.13	40.98	1625438.59	47
US 3.625%' 28	109.76	1.695	1.606	-0.42	16.78	1625438.59	47

Representative stocks from each major market Source: Merill Lynch Global Bond Indices † Local currencies. ‡ Total market value. In line with market convention, for UK Gilts inflation factor is applied to price, for other markets it is applied to par amount.

BONDS: TEN YEAR GOVT SPREADS

	Bid Yield	Spread vs Bund	Spread vs T-Bonds		Bid Yield	Spread vs Bund	Spread vs T-Bonds
Australia	3.79	1.46	0.10	Netherlands	2.52	0.19	-1.17
Austria	2.84	0.52	-0.85	New Zealand	4.31	1.99	0.62
Canada	3.03	0.70	-0.66	Norway	3.10	0.77	-0.59
Denmark	2.57	0.25	-1.12	Portugal	2.79	0.46	-0.90
Finland	2.84	0.51	-0.85	Spain	3.11	0.78	-0.58
Germany	2.33	0.00	-1.36	Sweden	0.00	-2.33	-3.69
Italy	2.19	-0.14	-1.50	Switzerland	1.40	-0.93	-2.29
Japan	0.37	-1.96	-3.32	United States	3.69	1.36	0.00

Interactive Data Pricing and Reference Data LLC, an ICE Data Services company.

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MORNINGSTAR®

FINANCIAL TIMES SHARE SERVICE

Main Market

	Price	+/-Chg	52 Week High	Low	Yld	P/E	Vol 000s
Aerospace & Defence							
Avon Protection	1076	2.00	1404	732.00	2.72	-18.16	12.5
BAE Sys	855.00	-6.60	869.40	542.60	2.83	15.63	2166.7
Chemring	293.50	-5.50	383.50	246.88	1.43	20.38	225.7
Automobiles & Parts							
FordMtr $✠	11.33	0.02	25.87	10.61	0.79	2.86	19471.0
Banks							
ANZ A$✠	24.07	0.06	28.33	20.78	-	-	1701.6
BcoSant	246.45	1.05	293.00	193.42	2.61	5.88	105.2
BnkGeorgia	2565	10.00	2695	960.00	-	7.94	19.3
BankIre Grp €	8.85	0.00	8.93	4.59	-	10.17	124.6
BkNvaS C$✠	66.10	0.28	95.00	63.19	5.38	8.63	623.4
Barclays✠	157.74	0.60	209.45	132.06	1.90	3.83	6124.7
CanImp C$✠	54.61	-0.71	83.75	54.12	10.53	3.95	3289.8
HSBC✠	510.30	-2.00	567.20	434.70	3.17	11.15	4165.4
LlydsBkg✠	46.03	-0.07	56.00	38.10	5.58	6.39	18153.2
NWG✠	264.50	-0.10	284.42	196.92	3.97	10.41	2696.6
PermTSB €	1.86	-0.01	1.89	1.18	-	-21.60	9.1
RylBkC C$✠	128.12	0.39	149.60	116.75	3.33	11.87	540.2
StandCh✠	625.00	-	641.00	431.30	1.42	14.02	940.2
..7.375%Pf	102.50	3.90	134.00	95.50	7.20	-	100.0
..8.25%Pf	110.15	-0.10	110.00	106.50	7.49	-	3.0
TntoDom C$✠	88.32	0.50	109.08	77.27	3.54	11.54	597.8
Westpc A$✠	23.50	-0.05	24.67	18.80	3.65	17.69	2705.4
Basic Resource (Ex Mining)							
Ferrexpo	172.90	7.20	308.00	96.00	8.29	1.34	615.8
Chemicals							
Elemntis	120.30	1.50	148.40	85.10	-	407.80	138.5
Johnsn Mtthey	2106	11.00	2536	1650	3.32	26.56	119.6
Victrex	1609	33.00	2502	1522	3.70	19.15	114.0
Construction & Materials							
Boot(H)	233.00	-2.00	349.00	225.00	2.36	12.46	13.5
CRH	3270	-5.50	3949	2736.5	2.62	13.59	107.8
GalfrdT	155.80	1.00	195.00	142.80	3.02	34.62	23.4
MorgSdl	1526	24.00	2575	1330	4.59	7.47	5.7
Tyman	231.00	2.00	416.00	182.40	3.46	9.13	67.8
Electronic & Electrical Equip							
Dialight	307.50	-2.50	385.03	225.00	-	1008.20	6.3
Discoverie PLC	750.00	23.00	1038	586.00	1.35	61.48	43.8
Halma	1990.5	-4.00	3232	1855.3	0.89	28.82	210.2
Morgan Ad	313.50	4.00	359.50	211.00	2.14	13.23	127.8
OxfordIn	2150	10.00	2830	1600	0.79	29.37	12.0
Renishaw	3628	-34.00	5095	3238	1.82	20.70	17.3
Spectris	2998	-31.00	3759	2371	2.32	9.86	100.5
TT Elect	172.00	4.60	263.50	123.40	3.78	23.89	30.6
XP Power	2040	110.00	5300	1402	4.51	10.90	4.9
Financial General							
3i	1315.5	-5.50	1477	1042	2.93	4.56	483.0

	Price	+/-Chg	52 Week High	Low	Yld	P/E	Vol 000s
abrdn	186.50	0.55	254.00	131.03	7.83	4.05	2358.8
Bridgepoint Grp Plc	189.90	0.10	496.50	166.20	-	11.87	284.6
CtyLonInv	425.00	-4.00	540.00	322.00	7.76	9.98	4.1
CloseBrs	1053	-6.00	1447	872.00	5.70	7.87	56.9
CoinShares Int Ltd SKr	19.48	-1.02	88.00	19.22	-	-0.03	13.9
Hargr Lans	850.60	6.80	1384.31	735.60	4.53	15.16	205.0
Indvardn SKr	257.50	3.00	293.30	205.40	2.51	-9.37	292.6
ICG	1135	-	2242	944.60	4.93	6.51	113.7
Investec	511.80	2.80	541.40	346.10	2.54	12.86	500.3
Jupiter	127.10	0.90	267.60	82.20	13.45	4.72	615.7
Liontrust	1070	14.00	2210	692.00	4.39	13.38	17.5
LSE Gp✠	7130	-58.00	8612	6230	1.08	72.90	101.5
M&G Plc	187.15	0.90	228.80	159.30	9.79	58.48	1267.3
Providnt	185.80	5.30	366.20	130.00	-	3.48	50.5
RathbnGrp	2065	35.00	2230	1426.08	3.58	15.97	9.4
Record	90.60	-3.40	95.00	60.00	2.54	24.89	50.6
S & U	2145	-5.00	2872.5	1920	4.20	10.13	0.1
Schroder	438.10	4.00	722.60	348.00	26.48	2.02	408.2
Shires Income	260.50	1.00	291.00	216.81	5.14	3.63	5.3
TP ICAP	174.40	1.00	210.20	100.85	3.44	249.14	174.8
Food & Beverages							
AngloEst	780.00	10.00	972.00	682.00	0.09	7.15	3.4
AscBrFd✠	1587	18.50	2063	1223	0.39	26.23	357.8
Barr(AG)	526.00	12.00	595.82	426.50	-	18.68	120.7
Britvic	782.50	-2.00	945.00	697.50	3.09	17.74	192.4
CarrsGroup	117.50	1.50	161.50	89.50	4.26	14.51	19.2
Coca-Cola HBC	1950.5	-	2633	1403.5	2.75	15.59	64.3
Cranswk	3040	-22.00	3888	2548	2.30	16.06	30.4
Devro	308.50	-	315.50	160.35	2.95	16.77	78.6
Diageo✠	3647.5	-15.50	4097	3282.5	1.99	28.06	924.4
Grncore	65.10	1.10	141.00	60.15	-	13.02	200.5
HiltonFd	553.00	6.00	1257.05	495.42	4.05	11.54	27.2
Kerry €	83.42	-3.08	116.00	83.42	1.02	20.34	10.3
PremFds	109.00	0.40	128.20	90.70	0.92	11.35	185.4
Tate&Lyl	715.80	1.00	912.57	647.80	4.30	15.33	191.4
Unilever✠	4214	1.00	4249.5	3267.5	3.44	21.63	426.7
..NV	-	-	-	-	-	-	-
Health Care Equip & Services							
GNStre kr	152.65	4.65	417.10	119.25	0.91	11.86	650.6
Mediclinic	498.00	-	503.50	304.60	-	31.13	66.1
Smith & Nephew	1105.5	8.00	1344	959.20	2.47	25.08	505.9
House, Leisure & Pers Goods							
BarrttDev	403.70	-1.30	752.40	313.00	7.28	6.31	974.4
Bellway	1931.5	6.00	3389	1572	6.08	5.81	37.0
Berkeley	3836	9.00	4918	3120	0.24	9.98	69.4
Burberry Gp	2004	-14.00	2193	1473.5	2.12	17.25	620.8
Cairn Homes	78.30	0.90	109.80	69.40	2.85	16.08	55.4
Crest Nicholson	234.00	4.40	374.40	170.50	1.75	8.51	150.4
GamesWk	8475	-	10259.8	5565	3.01	23.34	10.9
Gleeson	343.00	-3.00	774.00	331.00	4.37	5.36	6.5

	Price	+/-Chg	52 Week High	Low	Yld	P/E	Vol 000s
Headlam	300.00	-3.00	462.00	230.00	2.60	12.93	6.1
McBride	21.75	1.00	62.00	15.25	-	-3.88	20.4
Persimn	1237.5	6.50	2906.18	1113.5	18.99	5.04	274.6
Philips €	14.07	0.55	33.16	12.13	5.76	22.01	4906.8
PZCusns	209.50	-2.00	220.00	177.80	2.91	24.16	270.5
Redrow	465.20	4.00	713.00	367.40	5.27	5.77	82.3
Superdry Plc	117.40	-0.60	292.00	91.70	-	-5.29	1339.4
Vistry Group	626.00	7.50	1220	502.00	6.39	5.49	136.9
Industrial Engineering							
Bodycote	558.00	0.50	877.00	452.40	3.51	17.88	111.9
Castings	354.00	-	370.08	272.00	4.31	17.11	1.5
Goodwin	3235	-	3570	2350	3.16	17.88	0.8
Hill&Sm	1180	-8.00	1814	859.00	2.50	27.76	17.4
IMI	1319	15.00	1794	1069	1.74	18.02	78.2
MelroseInd	131.05	0.85	169.25	94.82	1.21	-13.65	1570.2
Renold	21.65	-0.15	31.30	19.19	-	7.73	104.7
RHIM	2174	30.00	3634	1557	5.79	5.13	5.9
Rotork	310.80	-0.60	368.00	225.20	2.78	33.78	425.7
Severfd	62.00	2.00	76.00	46.65	4.68	11.07	68.1
Trifast	69.00	2.20	165.00	49.10	2.32	11.40	66.0
Weir	1673.5	5.00	1936.5	1321	0.69	28.27	105.5
Industrial General							
Coats Group	68.30	-4.50	82.40	50.30	2.06	15.24	2992.7
Macfrlne	104.50	-1.50	135.00	85.20	2.60	12.12	21.5
Smith DS	324.50	5.50	392.30	238.10	3.73	18.44	1199.0
Smiths	1590.5	-2.50	1634.5	1323	2.37	25.29	169.5
SmurfKap	3078	22.00	4150	2415	3.18	14.04	30.2
Industrial Transportation							
Braemar	295.00	-2.00	350.00	215.00	1.69	9.79	56.2
Fisher J	385.50	4.50	533.00	242.00	-	-6.98	11.9
int'ldistser	211.10	3.30	523.81	173.65	4.74	2.42	622.1
OceanWil	890.00	-	1075	795.00	8.99	4.53	1.1
Insurance							
Admiral	2106	28.00	3254	1691.5	7.19	10.74	167.2
Aviva✠	444.00	-2.00	606.58	341.92	4.81	58.42	1160.9
Chesnar	283.50	-1.50	334.40	253.63	7.82	15.75	29.0
Direct Line	218.00	0.40	312.70	171.70	10.23	9.05	607.6
Eccles prf	127.00	-	154.89	121.00	6.79	-	13.2
Hansard	39.30	-	53.90	32.40	11.32	13.55	31.4
Hiscox	1100.5	-3.00	1110	769.40	0.77	27.25	367.4
Lancashire	638.50	-6.50	656.50	342.40	1.80	-33.26	289.6
Leg&Gen	250.60	0.50	299.60	191.37	7.11	7.69	2617.3
Old Mut	51.20	-0.20	81.04	44.05	5.38	7.43	149.5
PhoenixGrp	611.80	4.20	692.80	501.00	7.88	-7.08	281.3
Prudntl✠	1116.5	17.00	1311	782.40	1.05	18.13	2708.2
StJmsPl	1091	4.00	1710	904.60	5.62	20.78	272.4
LEISURE							
PhotoMe International Plc	107.00	5.00	109.00	55.70	-	18.67	655.5

	Price	+/-Chg	52 Week High	Low	Yld	P/E	Vol 000s
Media							
4imprint	4480	130.00	4480	2175	0.25	75.60	30.1
Auto Trader Group PLC	518.20	-3.60	738.80	479.80	0.96	25.56	795.1
DlyMailA	270.00	-2.50	1178	264.50	8.96	10.31	111.0
Hyve Group	68.80	-1.00	116.80	43.86	-	-12.29	74.3
Informa	615.20	1.60	631.00	488.00	-	-27.22	1196.2
ITV	74.24	0.82	124.00	53.97	-	7.98	2540.2
Pearson	937.60	-8.00	1006.29	591.00	2.11	44.86	339.9
MEDIA							
Reach PLC	94.90	3.40	280.00	64.40	7.39	105.44	298.4
Media							
RELX PLC✠	2299	-9.00	2474	2056	2.07	30.33	709.1
Rightmove PLC	516.60	-0.20	803.16	437.80	0.87	29.24	561.0
STV Grp	270.00	-5.00	363.00	235.00	3.59	6.59	20.1
WPP✠	816.60	-0.80	1231.5	713.00	3.25	15.55	377.3
Mining							
AngloAmer✠	3249.5	45.50	4292.5	2487.5	5.49	6.43	726.0
AnGoldA R	339.36	7.46	434.78	219.10	2.37	15.14	212.0
Antofagasta	1544	7.50	1799.5	971.20	3.44	15.98	265.9
BHP Group	2565.5	28.00	3040	1998.6	-	11.22	250.2
Ecora Resources	148.00	-0.40	192.67	130.20	6.11	11.14	91.6
Fresnillo	872.60	1.60	934.85	610.60	2.79	20.66	125.9
Glencore✠	558.00	1.00	571.80	372.05	1.59	20.43	9908.9
Harmony R	61.50	2.53	89.13	34.71	2.11	21.18	882.7
PolymtIntl	245.00	2.70	1301	92.02	39.82	-	99.2
Rio Tinto✠	5808	69.00	6343	4436.95	8.65	6.07	472.2
Troy Res A$	0.04	0.00	0.20	0.03	-	-0.94	3131.9
Oil & Gas							
BP✠	478.90	1.00	503.30	332.25	3.29	17.38	13218.7
Capricorn Energy	258.80	7.80	262.00	183.00	-	2.05	1629.6
ExxonMb $✠	108.15	2.27	114.66	60.42	2.87	22.53	4763.8
Gazprom PJSC ADR $#	0.58	-	10.97	0.02	54.95	0.28	3213.3
GeoPark $	14.11	0.99	18.52	10.26	0.78	16.00	55.7
HELLENiQ ENERGY €	7.47	0.14	7.85	5.81	1.28	7.12	98.8
ImpOil C$✠	65.15	1.37	79.83	44.73	1.51	19.55	315.0
Shell PLC✠	2366.5	14.00	2527	1616.4	2.56	12.47	1696.7
TrnCan C$✠	55.13	1.04	74.44	53.53	6.05	30.95	3882.3
Wood Group (John) PLC	135.00	-0.40	255.00	102.05	-	-5.55	398.4
Pharmaceuticals & Biotech							
AstraZeneca✠	11238	-68.00	11540	8214	1.84	1902.81	399.5
Dechra	2628	-22.00	5285	2487.45	1.54	39.24	67.2
GlaxoSmh✠	1452.8	-2.00	2753.96	1280.92	5.51	16.78	1220.4
HikmaPhm	1545.5	-28.50	2266	1174.5	2.48	11.58	211.3
Oxfd Bio	439.00	8.50	1250	276.62	-	19.74	73.1
RichterG $	23.40	-0.20	27.00	16.40	2.61	11.34	0.0
Real Estate							
REITs							
Assura	53.90	0.65	72.35	47.43	5.38	10.78	1395.3

	Price	+/-Chg	52 Week High	Low	Yld	P/E	Vol 000s
BigYellw	1141	-	1730.36	938.50	2.95	7.52	83.6
BritLand	394.10	2.40	553.60	317.80	3.82	53.99	644.5
Cap&Reg	60.00	1.20	67.00	42.80	-	-0.53	14.9
Civitas SH	60.70	0.40	97.70	56.90	8.96	10.36	1913.2
DrwntLdn	2348	26.00	3518	1783	3.21	10.46	44.8
Great Portland	735.50	-15.00	810.50	636.00	1.71	-9.22	515.5
LandSecs	618.20	1.40	812.80	459.30	5.50	-16.14	246.5
LondonMtrc	172.20	1.20	285.20	157.76	5.08	3.67	439.6
Palace Cap	214.00	1.00	297.00	195.00	5.14	10.24	4.2
PrimyHth	110.10	1.40	153.00	95.75	5.63	11.23	815.0
SEGRO	760.00	3.80	1508	669.20	2.97	2.25	617.2
Shaftbry	370.00	9.20	651.00	322.80	0.65	-7.12	152.0
TritaxBBOX	138.20	1.20	251.40	120.08	4.71	2.50	2349.2
Wkspace	435.80	0.60	883.50	335.20	4.07	-6.48	97.0
Real Estate Inv & Services							
Cap&Count	104.60	2.40	178.30	92.90	0.48	30.76	450.4
CLS	151.80	1.40	231.00	130.20	4.97	5.18	91.2
Grainger	259.40	4.40	318.80	202.80	2.11	16.11	327.2
Harworth Grp	103.00	-2.00	193.30	99.00	1.78	3.56	16.5
Helical	335.50	9.50	472.50	292.25	3.01	8.10	16.5
Lon&Assc	20.00	-	27.85	10.00	-	-2.72	1.2
MacauPrp	48.80	-0.10	60.82	35.95	-	-6.33	22.4
Mntview	12000	200.00	14531.21	11000.6	3.54	14.96	0.0
Safestre	939.50	13.00	1425	744.50	2.15	5.33	66.3
Savills	836.50	11.50	1472	750.00	2.75	8.38	25.9
SiriusRE	72.70	-0.60	143.20	64.20	4.49	5.67	916.6
Smart(J)	160.50	-	165.00	150.00	2.01	4.39	12.1
U+I	148.50	-0.50	151.50	58.51	-	-2.12	98.8
Retailers							
Caffyns	500.00	-	650.00	450.00	-	7.27	0.5
Dunelm	955.00	-2.00	1400	659.50	3.66	12.87	43.4
Halfords	200.60	3.60	351.00	124.00	2.49	6.69	275.8
Inchcape	824.00	5.00	920.00	615.00	1.61	27.84	133.8
JDSportsF	119.55	0.30	219.27	88.40	0.24	14.44	2064.6
Kingfisher	232.10	0.60	352.70	198.60	5.19	5.83	2313.3
Marks&Sp	123.60	3.55	240.13	91.56	-	95.08	1283.0
Ocado	626.60	-2.60	1680.5	380.30	-	-20.76	368.5
Saga	125.50	2.60	329.60	71.10	-	-13.41	268.1
Sainsbury (J)	219.30	-0.80	300.00	168.70	4.83	18.43	1261.8
Tesco✠	226.70	0.60	304.10	194.35	4.04	11.54	5031.5
Support Services							
AshtdGp	4721	-4.00	6156	3269	0.96	22.98	157.4
Bunzl	2778	1.00	3249	2542	1.96	21.08	153.8
Capita	24.86	0.60	39.00	19.89	-	1.89	466.9
DCC	4067	-17.00	6508	3986	3.93	13.44	44.7
DeLaRue	80.00	0.70	162.00	71.10	-	10.53	229.0
Diploma	2814	6.00	3413.52	2090	1.51	50.34	43.6
DWF Group PLC	79.00	-3.00	124.00	67.05	5.70	-15.49	58.0
Essentra PLC	241.50	-	348.50	168.60	2.19	27.13	58.9
Experian	2807	-8.00	3689	2242	1.25	36.01	224.3
Ferguson	10285	35.00	13360	8602	1.75	15.19	201.5

	Price	+/-Chg	52 Week High	Low	Yld	P/E	Vol 000s
Hays	117.30	0.40	151.10	98.75	1.04	16.93	241.4
Homesve	1197	1.00	1198.8	578.33	2.17	107.84	710.7
HowdenJny	568.60	-2.20	927.60	472.20	2.36	10.73	235.9
Intertek	3998	33.00	5702	3485	2.65	22.47	122.6
Kin and Carta	217.00	-1.00	305.00	164.00	-	-180.83	25.1
MearsGp	205.00	-	245.00	178.50	1.22	17.83	23.9
Mitie	77.90	-	82.10	44.70	-	38.95	396.8
Rentokil	514.60	0.40	586.60	441.20	1.46	36.50	855.8
Ricardo	475.00	-	498.53	325.00	1.44	42.41	14.2
RbrtWlts	528.00	-	820.00	418.08	3.11	12.08	10.3
RS Grp	909.00	2.50	1246	790.00	2.79	23.07	150.3
SIG	30.30	0.80	49.26	27.00	-	-12.63	157.6
Vp	710.00	30.00	985.00	640.00	3.52	17.49	0.0
Tech - Hardware							
SpirentCM	260.20	-5.00	294.00	209.80	1.76	24.24	222.2
Tech - Software & Services							
Computcnt	1896	-16.00	3050	1780	2.92	11.78	64.6
MicroFoc	528.60	3.60	531.60	256.00	3.38	-5.60	183.5
NCC Grp	198.80	1.20	245.00	162.80	2.34	66.27	61.7
Sage	745.80	-1.60	862.20	587.20	2.33	28.60	403.9
TriadGp	85.00	-	180.00	80.00	2.35	9.33	22.0
Telecommunications							
Airtel Africa	112.80	1.40	173.10	106.54	2.89	10.05	3193.0
BT✠	114.00	-0.35	201.40	110.55	-	11.07	3693.1
TelePlus	2220	5.00	2530	1262	2.57	56.92	26.4
Vodafone Gp✠	83.90	0.17	141.60	83.24	9.22	-187.70	27278.4
Tobacco							
BrAmTob✠♦	3316.5	-3.00	3645	2717.5	6.50	11.22	521.1
Imperial Br✠	2082	-8.00	2185	1434.23	6.63	6.96	405.7
Travel & Leisure							
Carnival	580.00	8.80	1604	498.90	-	-0.94	266.4
Dalata Hotel	285.00	-	385.18	239.00	-	-121.23	0.0
easyJet	340.70	3.00	729.20	276.87	-	-2.14	752.1
FirstGrp	101.30	0.60	145.66	83.75	-	24.12	526.0
Flutter Entertainment	11500	-45.00	12365	7340	-	-48.63	51.0
Fuller A	493.00	3.00	738.00	410.31	-	-10.30	21.6
IntCon Htels Gp	4725	-31.00	5386	4174	-	44.26	149.5
Intl Cons Air	128.18	-0.08	180.10	90.47	-	-2.84	2093.8
Natl Exp	127.10	-0.30	288.00	125.60	-	-7.57	963.5
PPHE Htl	1185	-5.00	1617.25	1155	-	-9.63	0.5
TUI	135.35	0.25	297.50	101.45	-	-1.41	601.6
Whitbrd	2624	-8.00	3253	2245.51	-	-21.30	96.1
Utilities							
Drax	701.50	15.00	845.89	467.20	2.54	51.96	747.4
Natl Grid✠	989.60	-8.00	1271.45	844.29	4.97	23.07	1766.8
Pennon	883.00	1.00	1194	735.00	3.69	63.98	126.2
Severn Trent	2652	1.00	3228	2167.42	3.83	-98.59	157.5
SSE	1707	-9.00	1935.5	1405	4.75	6.67	361.9
UtdUtils	986.80	-3.40	1186.88	813.20	4.38	90.53	437.2

AIM

	Price	+/-Chg	52 Week High	Low	Yld	P/E	Vol 000s
Aerospace & Defence							
Cohort	500.50	0.50	580.00	384.00	2.22	44.49	38.8
Velocity Composites PLC	38.50	0.30	49.00	13.65	-	-12.83	54.2
Banks							
Caribbean Inv	26.50	-	45.40	24.03	-	3.05	138.6
Basic Resource (Ex Mining)							
CropperJ	885.00	-	1500	820.00	-	26.98	3.3
Chemicals							
Directa Plus PLC	98.70	-0.80	157.00	66.25	-	-23.00	2.8
Versarien PLC	7.81	-1.44	30.00	7.56	-	-2.24	2428.3
Construction & Materials							
AccsysTch	62.00	-0.30	183.83	54.40	-	-36.43	0.1
Electronic & Electrical Equip							
Checkit	19.00	-	51.00	13.74	-	-2.32	0.5

	Price	+/-Chg	52 Week High	Low	Yld	P/E	Vol 000s
LPA	76.50	-	84.00	61.60	-	-283.33	2.0
ThorpeFW	420.00	17.50	500.00	335.38	1.38	29.23	21.9
Zytronic	130.00	-	192.49	110.00	-	43.33	3.5
Financial General							
Appreciate Grp	40.70	-	42.60	21.10	2.46	17.70	59.7
Arbuthnot	857.50	-	1050	625.00	1.87	18.97	0.0
BP Marsh	301.00	-1.00	363.00	272.25	0.81	8.29	570.9
Burford Capital Ltd	665.00	10.00	943.38	590.00	2.08	-2725.41	40.9
Gresham House Plc	754.00	20.00	1020	681.50	0.80	30.26	42.8
MattioliWds	625.00	-	890.00	530.00	3.36	-223.21	5.9
Numis	193.40	0.40	348.00	170.00	6.20	3.94	15.8
Premier Miton Group	102.00	1.00	199.50	84.69	8.04	11.38	155.6
STM Group	29.00	-	32.13	22.05	4.83	11.17	71.3
Food & Beverages							
Camellia	4830	10.00	6960	4300	2.98	88.95	0.1
Fevertree Drinks	1036	-7.00	2746	804.50	1.52	27.13	75.8
FinsbryFd	92.00	1.00	103.00	65.00	2.61	10.95	111.6

	Price	+/-Chg	52 Week High	Low	Yld	P/E	Vol 000s
Nichols	1100	-	1565	957.00	1.69	-18.32	2.2
Health Care Equip & Services							
AVO	12.50	-1.50	38.00	12.00	-	-1.48	763.4
Tristel	400.00	-20.00	500.00	270.00	1.64	82.47	35.1
House, Leisure & Pers Goods							
Airea	28.00	-	33.00	23.00	-	10.37	46.9
Churchll	1175	-	1820	1020	-	139.88	4.5
Frontier Developments PLC	948.00	16.00	1952	926.00	-	27.32	22.5
Portmern	302.50	-	713.00	285.00	4.30	12.88	5.3
Sanderson Design Grp	116.50	-	190.00	86.00	-	9.98	2.3
Industrial Engineering							
600 Grp	8.25	-0.38	16.97	8.05	-	48.25	510.8
MS Intl	745.00	275.00	746.60	211.00	0.47	106.43	113.4
Pres Tech	37.00	0.50	103.00	23.20	-	-3.07	84.2

	Price	+/-Chg	52 Week High	Low	Yld	P/E	Vol 000s
IT							
Keywords Studios	2746	-2.00	3056	1950	0.02	76.10	35.0
Learning Technologies Group	113.00	1.00	184.10	97.70	1.11	47.60	172.7
Media							
Mission Group	44.00	-	71.00	40.80	5.30	7.46	17.9
Mining							
AMC	1.20	-	4.01	0.61	-	-27.91	1775.4
BotswanaD	0.83	-	1.39	0.80	-	-13.75	64.9
CentAsiaM	244.50	-1.00	284.50	187.47	6.61	7.16	29.8
Gemfields	18.25	-	19.90	12.00	-	-25.21	69.1
Oil & Gas							
BorSthnPet	2.00	-0.19	8.50	0.57	-	-19.61	1224.9
ClontarfEn	0.07	-	0.80	0.05	-	-1.30	5056.0
Egdon Res	2.65	-0.05	10.00	1.35	-	-3.40	100.6
Hurricane Energy	7.81	0.20	12.37	3.37	-	-0.78	1490.3
Phoenix Global	6.50	0.25	7.95	3.07	-	-1.63	53.0

	Price	+/-Chg	52 Week High	Low	Yld	P/E	Vol 000s
UnJackOil	29.00	-	53.72	13.00	-	-15.03	82.9
Pharmaceuticals & Biotech							
Abcam	1226	123.00	1757	1013.57	-	185.76	8642.4
Reneuron	9.75	-	83.00	9.50	-	-0.61	95.2
Sareum	77.50	-2.50	345.00	55.10	-	-25.83	44.1
Real Estate							
Lok'nStor	950.00	-	1090	674.00	1.58	28.81	57.3
Retailers							
ASOS	513.00	16.00	2382.4	459.90	-	17.04	147.8
Boohoo Group PLC	34.75	-0.20	128.40	30.00	-	7.49	8030.6
CVS Group PLC	1983	20.00	2315	1512	0.33	55.55	285.6
Support Services							
Begbies	143.60	0.60	156.00	97.00	2.09	718.00	166.5
Christie	117.50	-	135.00	88.00	-	50.00	1.5
Gattaca	71.00	-	154.20	53.00	2.11	-54.62	10.0
Impellam	655.00	30.00	700.00	406.00	-	35.79	14.4

	Price	+/-Chg	52 Week High	Low	Yld	P/E	Vol 000s
JhnsnSrv	98.50	2.60	167.00	69.00	-	61.56	221.3
LonSec	2850	380.00	3940	2150	2.81	15.72	0.2
NWF	263.00	-3.00	288.00	185.00	2.74	131.50	23.6
Petards	9.75	-	13.80	8.01	-	17.73	6.2
Renew	730.00	20.00	842.00	550.00	1.80	18.04	57.4
Smart Metering Systems	772.00	3.00	968.00	670.00	3.40	242.01	25.3
Tech - Hardware							
IQE	48.80	-0.20	54.80	27.67	-	-542.22	326.5
Tech - Software & Services							
BoBlue Prism Group PLC	1274	-	1392	747.50	-	-23.65	1869.0
Eckoh	41.00	-	55.00	36.20	1.49	40.20	273.7
Oxford Metrics	110.50	4.00	118.00	73.44	1.63	48.04	339.0
Travel & Leisure							
gamingrealms	25.23	0.28	35.00	20.39	-	-630.63	27.3
Jet2	994.00	-5.20	1434.19	637.40	-	-5.34	400.4
MinoanGp	1.03	-	1.37	0.87	-	-7.27	283.4

Investment Companies

Conventional (Ex Private Equity)	Price	+/-Chg	52 Week High	Low	Yld	NAV	Dis(-) or Pm
abrdnuksm	458.00	6.00	767.00	389.73	1.68	512.8	-10.7
3i Infra	325.50	2.00	368.50	248.75	3.01	320.2	1.7
AbnAsianIn	220.00	3.00	236.00	185.50	4.23	242.4	-9.2
Abrdn Div I&G	94.00	1.00	104.50	83.20	5.85	115.1	-18.3
AbnLatAmIn	52.25	-	62.00	46.00	6.70	60.8	-14.1
AbnNewIndia	552.00	-2.00	624.00	476.25	-	662.5	-16.7
Abf Sml	1314	14.00	1488	1066	2.58	1461.8	-10.1
Abf Spl Inc	70.00	-1.00	84.80	53.40	4.36	79.3	-11.7
abrdn Asia Focus	259.00	-	298.56	54.40	1.16	283.2	-8.5
Abrdn Eqt Inc	345.00	1.00	385.14	290.00	5.97	349.7	-1.3
abrdnJapInv	560.00	15.00	735.20	507.49	2.68	641.8	-12.7
AbnNewDn	278.00	-2.00	319.36	243.00	1.55	314.6	-11.6
Alliance	937.00	1.00	1046	867.84	1.80	983.3	-4.7
AllianzTech	206.50	-	361.47	199.40	-	228.8	-9.7
Art Alpha	310.50	-1.00	425.00	262.00	1.71	333.4	-6.9
Asia Dragon	422.00	2.00	512.00	352.00	1.54	467.4	-9.7
Aurora Inv	194.50	-0.50	254.00	178.00	0.28	205.6	-5.4
AVI JapOpp	114.50	-	122.50	103.00	1.18	111.7	2.5
Axiom	84.00	-	100.67	75.00	7.14	92.7	-9.4
BG Euro	86.90	-	149.60	73.50	0.40	99.8	-12.9
BG Japan	756.00	2.00	1004	657.00	0.79	801.1	-5.6
BG Shin	151.00	-	229.00	131.32	-	163.1	-7.4
Baillie Gifford UK	166.00	2.20	246.00	139.40	1.46	186.7	-11.1
Bankers	99.10	0.10	124.60	90.88	2.19	108.4	-8.6
BB Healthcare Trust	154.40	0.40	204.00	132.40	3.57	170.5	-9.4
BiotechGth	940.00	20.00	1217.6	722.37	-	1007.4	-6.7
BlckRoEne	136.00	0.50	151.00	95.00	2.94	138.0	-1.4
BlckRFrnt	130.00	1.00	140.00	114.00	3.96	139.9	-7.1
BlckRGtEur	465.00	1.00	704.00	396.00	1.32	492.8	-5.6
BlckR I&G	191.00	-	206.00	164.00	3.77	203.3	-6.1
BlckRckLat	378.00	-	457.00	330.00	5.64	428.7	-11.8
BlckRSmlr	1340	-2.00	2140	1162	2.49	1557.7	-14.0
BlckRckSusAm	195.00	-3.50	215.00	183.26	4.10	206.2	-5.4
BlckRThrmt	591.00	1.00	975.68	477.96	1.73	615.7	-4.0
BlckRWld	689.00	-	804.98	524.00	3.45	688.4	0.1
Brunner	1010	18.00	1130	888.00	2.00	1146.2	-11.9
Caledonia Inv	3575	-5.00	4075	3015	1.76	5021.0	-28.8
CanGen C$	32.32	0.11	44.63	28.21	2.61	48.2	-32.9
City Lon	409.50	1.50	427.00	363.28	4.68	400.4	2.3
CQSNatRs	198.50	-	232.08	147.50	2.82	232.7	-14.7
CTMgdT	231.00	-	293.79	214.00	-	231.0	0.0
CTMgdT	120.50	-	146.75	112.00	5.27	119.5	0.8

	Price	+/-Chg	52 Week High	Low	Yld	NAV	Dis(-) or Pm
CT Cp&I	302.00	7.00	341.00	269.56	3.84	297.9	1.4
CT UK HIT A	82.50	-	94.38	71.00	6.42	89.2	-7.5
CT UK HIT B	84.00	-	95.00	79.00	6.31	89.2	-5.8
CT UK HIT UNIT	330.00	-	376.00	294.00	-	356.7	-7.5
Dun Inc	290.00	3.00	330.00	250.75	4.41	292.7	-0.9
EcofinGlobal	213.00	3.00	252.00	165.00	3.10	216.4	-1.6
Edin Inv	633.00	1.00	653.60	537.00	3.79	685.4	-7.6
Edin WWd	177.40	3.60	305.00	154.60	-	189.0	-6.1
EuroAsset	90.00	-	140.50	74.60	8.89	95.6	-5.9
Euro Opps	711.00	-2.00	847.00	608.00	0.28	830.8	-14.4
F&C Inv Trust	895.00	-1.00	942.00	767.21	1.39	922.7	-3.0
FidAsian	490.00	1.00	497.10	406.22	1.80	514.4	-4.7
FidChiSpS	242.00	3.50	318.29	181.97	1.93	260.2	-7.0
FidelityEmrgMkt	597.50	2.50	824.00	552.70	2.21	683.1	-12.5
Fid Euro	319.00	-1.00	384.25	256.50	2.05	336.9	-5.3
Fid Jap	166.25	-3.75	235.50	143.00	-	177.1	-6.1
Fid Spec	280.00	1.00	311.00	232.00	2.10	292.3	-4.2
FinsG&I	838.00	-	925.00	731.80	3.07	881.5	-4.9
FstPacfic HK HK$	2.36	-	3.63	2.08	5.40	-	-
GRIT	2.80	-	112.00	2.40	-	9.6	-70.8
HAN	180.00	-	218.00	166.00	1.78	302.1	-40.4
HANA	175.50	3.00	218.94	168.00	1.82	302.1	-41.9
Hen Div Inc Tr	69.40	0.80	84.40	56.26	6.34	71.3	-2.7
HenEuroF	146.50	-0.50	164.61	120.60	2.14	167.8	-12.7
HenEuro	126.50	2.00	150.50	105.51	1.98	143.7	-12.0
HenFarEs	270.50	-0.50	306.40	240.00	8.61	261.8	3.3
HenHigh	165.25	-0.25	185.50	137.25	6.02	164.2	0.6
HenInt Inc	177.00	1.50	184.00	150.00	3.39	183.1	-3.3
Hen Opp	1092.5	-	1450.05	942.45	2.47	1235.2	-11.6
HenSmlr	828.00	7.00	1242	674.33	2.87	907.4	-8.8
Herald	1770	8.00	2510	1540	-	2085.7	-15.1
HICL Infra	162.00	-0.20	184.98	138.89	5.09	164.2	-1.3
Highbridge Tactical	244.00	1.00	282.00	216.00	-	268.3	-9.1
Impax Env.	417.00	0.50	560.00	370.88	0.91	418.6	-0.4
Ind IT	420.50	-	583.16	385.00	1.90	-	-
IntBiotech	728.00	6.00	773.25	563.00	3.90	727.6	0.1
Intl PP	150.80	-	174.81	132.72	4.95	157.3	-4.1
Inv AsiaTr	332.00	-	365.64	280.00	4.85	372.3	-10.8
Invesco Bond Inc	166.50	0.50	191.00	141.04	6.31	162.4	2.5
IPST BalR	130.50	-	176.00	111.00	-	151.9	-14.1
IPST Gbl Eq	229.00	1.00	250.00	200.00	3.10	250.9	-8.7
IPST Mngd	98.00	-	102.74	93.00	1.02	107.0	-8.4
IPST UK Eq	164.50	1.00	199.98	141.00	4.04	182.3	-9.8
IP UKSmall	419.00	-	617.94	373.50	4.61	494.0	-15.2

	Price	+/-Chg	52 Week High	Low	Yld	NAV	Dis(-) or Pm
JPM Amer	683.00	-1.00	800.00	650.00	0.99	696.2	-1.9
JPM Asia	360.50	2.00	454.29	294.50	5.24	394.5	-8.6
JPM China	339.50	6.50	510.00	246.50	6.72	363.7	-6.7
JPMElct MC	103.00	-	105.00	99.00	0.39	103.5	-0.5
..MG	937.50	-	1115.3	886.25	1.71	958.3	-2.2
..MI	100.00	-	111.00	88.00	4.75	98.9	1.1
JPM Emrg	109.40	0.20	129.00	91.00	1.23	116.9	-6.4
JPM EurGth & Inc	85.50	0.10	95.00	70.30	6.67	96.6	-11.5
JPM EuDisc	397.00	-0.50	548.00	339.00	1.69	465.5	-14.7
JPM Clavr	698.00	-2.00	778.00	610.32	4.44	700.8	-0.4
JPMGblCoreRa	89.40	-0.20	113.00	80.80	4.19	103.2	-13.4
JPM GEI	126.50	0.50	148.00	108.00	4.03	138.8	-8.9
JPM GI Gr&Inc	423.50	-2.50	474.00	386.00	3.56	427.4	-0.9
JPM Ind	826.00	-8.00	898.00	691.30	-	977.1	-15.5
JPM JpCapSm G&I	329.00	2.00	493.00	301.00	6.81	351.9	-6.5
JPM Jap	457.00	-0.50	675.00	408.50	1.12	482.1	-5.2
JPM Mid	879.00	4.00	1375	735.00	3.36	993.2	-11.5
JPMRussian	83.00	-0.30	794.00	55.20	42.17	46.7	77.7
JPM Smlr	284.00	2.00	404.00	230.00	2.01	312.3	-9.1
JPM US Sml	393.00	3.00	471.00	337.25	0.64	419.2	-6.2
KeystoneInv	339.00	-1.00	358.00	161.00	3.30	236.9	43.1
Law Deb	770.00	9.00	829.00	649.00	3.72	751.3	2.5
LinTrain £	1070	-	1390	944.00	4.40	1056.8	1.2
Lowland	122.00	-	143.34	99.05	4.92	130.8	-6.7
Majedie	190.25	-1.75	235.00	156.80	5.99	241.0	-21.1
Marwyn Val	95.00	-	121.94	90.00	4.77	171.3	-44.5
MercantIT	193.60	-	272.00	158.33	3.46	223.0	-13.2
MrchTst	558.00	1.00	591.00	480.00	4.88	551.2	1.2
Mid Wynd	701.00	8.00	864.00	639.80	0.91	701.0	0.0
Monks	949.00	3.50	1385.95	875.00	0.21	1051.9	-9.8
MontanSm	131.00	-2.00	221.00	104.20	0.71	146.0	-10.3
Mur Inc	833.00	-	928.00	715.00	3.63	887.9	-6.2
Mur Int	1330	-	1352	1090.04	4.10	1316.1	1.1
CQSNewCityHY	53.00	0.60	57.20	48.20	8.43	48.3	9.7
New Star IT	124.00	1.00	147.70	115.30	1.13	175.1	-29.2
NorthAmer	307.00	3.00	324.00	256.30	3.52	330.3	-7.1
NthAtSml	3570	30.00	4750	3125	0.84	4917.5	-27.4
PacAsset	352.00	-5.00	370.27	286.32	0.68	374.2	-5.9
PacHorzn	584.00	-3.00	866.00	507.75	-	610.4	-4.3
PerAsset	476.50	0.50	507.00	465.50	117.52	-	-
PolarHealth	334.00	1.00	337.00	262.00	0.60	346.0	-3.5
PolarFins	153.00	1.20	184.00	131.80	2.63	162.6	-5.9
PolarTech	1740	-	2751.34	1732	-	1965.1	-11.5
RIT Cap	2080	30.00	2740	1928	1.69	2454.0	-15.2

	Price	+/-Chg	52 Week High	Low	Yld	NAV	Dis(-) or Pm
Ruffer Inv Pr	310.50	-1.50	329.00	283.00	0.58	307.7	0.9
Schroder ToRt	412.00	9.00	508.00	366.50	1.72	430.5	-4.3
SchdrAsiaP	511.00	2.00	592.00	446.00	1.57	569.3	-10.2
SchdrEurReE	80.60	1.00	117.00	73.20	6.80	127.5	-36.8
Schdr Inc	301.00	-	319.50	254.60	4.19	298.5	0.8
SchdrJap	205.00	1.00	218.00	185.95	2.39	230.0	-10.9
SchdrOrient	258.50	1.50	277.00	230.00	3.98	268.2	-3.6
SchdrRealEst	41.80	0.30	61.00	40.00	6.06	75.3	-44.5
SchdrUKMd	546.00	-	718.00	454.00	2.44	628.4	-13.1
SchdrUKPubPriv	15.50	-0.10	34.13	14.80	-	30.3	-48.8
ScotAmer	507.00	2.00	546.00	434.00	2.43	499.2	1.6
ScottMort	721.60	4.60	1358.66	670.60	0.47	803.3	-10.2
ScottOrtll	1157.5	7.50	1230	998.82	0.99	1310.9	-11.7
Smithson	1304	22.00	2040	1120	-	1394.2	-6.5
StrategicEq	276.00	6.00	324.28	252.00	0.58	292.4	-5.6
Temp Bar	219.50	1.00	255.86	195.20	3.42	233.5	-6.0
Tetragon $	9.70	-	10.56	8.28	3.67	28.2	-65.6
EurSmlCom	146.00	1.50	178.00	122.93	2.14	171.9	-15.1
GblSmlrTrst	143.80	-0.60	172.81	122.00	1.22	162.2	-11.3
TRIG	131.20	1.00	148.57	112.60	5.15	134.2	-2.2
TroyInc&G	69.20	-	83.00	64.43	3.84	71.0	-2.5
Utilico Emerging Market	207.00	2.00	227.52	196.50	3.79	240.9	-14.1
UIL Inv	155.00	-	260.00	144.00	5.16	233.2	-33.5
VEIL	585.00	-	772.00	500.00	-	654.0	-10.6
Witan	220.00	2.00	252.00	199.78	2.50	233.8	-5.9
WwideHlth	3260	15.00	3625	2820	0.67	3470.8	-6.1

Conventional - Private Equity	Price	+/-Chg	52 Week High	Low	Yld	NAV	Dis(-) or Pm
abrdnPvEq	411.00	-	575.00	365.00	3.28	727.8	-43.5
BGUSGROWTH	150.10	0.30	323.00	143.80	-	174.4	-13.9
BG China Growth	267.50	3.50	385.50	206.25	2.67	288.3	-7.2
CT PvtEq	427.00	7.00	520.00	375.51	4.34	710.9	-39.9
HVPE	2250	15.00	2860	1986.11	-	4119.0	-45.4
HgCapital	352.50	-0.50	457.50	310.00	1.42	449.9	-21.6
ICG Ent Tr	1170	-	1288	928.00	2.14	1856.0	-37.0
Pantheon Intl	259.00	0.50	342.50	229.23	-	479.0	-45.9
PrincssPE €	8.50	0.02	14.85	7.80	7.52	14.1	-39.7
Unbound Group plc	7.75	-	67.40	7.25	-	-	-

Discretionary Unit Fund Mngrs (1000)F	Price	+/-Chg	52 Week High	Low	Yld	NAV	Dis(-) or Pm
Right &ISS	1887.5	2.50	2727.9	1850	1.71	2270.1	-16.9

Conventional - Property ICs	Price	+/-Chg	52 Week High	Low	Yld	NAV	Dis(-) or Pm
Direct Property							
abrdnPropInc	60.30	2.70	90.00	50.82	5.66	104.8	-42.5
AEW UK REIT	99.80	2.80	135.00	83.77	8.02	121.8	-18.1
Bal ComPrp	86.60	-	124.20	68.53	4.94	139.6	-38.0
CTRealE	68.00	1.20	101.00	66.40	5.44	122.0	-44.3
Longbow	52.25	-0.25	87.20	50.50	11.48	64.9	-19.5
TR Prop	300.50	-	494.06	263.00	4.73	322.8	-6.9
Tritax EuroBEUR €	0.68	-0.01	1.41	0.66	6.95	1.3	-47.7
Tritax EuroBGBP	60.00	-0.20	118.60	57.70	-	-	-
UKComPrp	57.80	0.60	95.80	52.00	5.06	101.5	-43.1

VCTs	Price	+/-Chg	52 Week High	Low	Yld	NAV	Dis(-) or Pm
Baronsmead 2nd VT	63.00	-	83.50	51.00	10.32	66.8	-5.7
BSC VCT	75.00	-	83.50	73.00	9.33	85.0	-11.8
..VCT2	54.00	-	59.50	53.00	14.81	59.5	-9.2
Inc&GthVCT	76.00	-	99.50	70.00	6.58	81.9	-7.2
Nthn 2 VCT	55.00	-	67.95	53.50	6.36	58.2	-5.5
Nthn 3 VCT	85.00	-	99.22	83.50	5.29	90.0	-5.6
NthnVent	58.50	-	69.50	57.00	7.69	61.5	-4.9
UnicornAIM	116.50	-	212.00	108.00	5.58	131.8	-11.6

Zero Dividend Preference Shares	Price	+/-Chg	52 Week High	Low	HR SP	WO	TAV 0%
Abf Spl Inc	119.50	-	121.00	113.00	-54.6	-92.8	-
UIL Finance 2024 ZDP	125.00	-	126.24	115.00	-50.4	-62.8	-
UIL Finance 2028 ZDP	95.50	-	102.00	82.40	-22.2	-26.9	-
UIL Finance 2026 ZDP	114.50	-	118.40	104.36	-30.6	-37.9	-

Investment Companies - AIM

	Price	+/-Chg	52 Week High	Low	Yld	NAV	Dis(-) or Pm
BB Biotech AG SFr	56.90	-0.10	75.25	49.35	5.8	-	-
CrysAmber	97.50	-	123.50	95.00	2.6	127.0	-23.2
Infra India	0.43	-0.03	0.85	0.20	-	10.6	-95.9

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- ✠ FT Global 500 company
- ♦ trading ex-dividend
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- # price at time of suspension from trading

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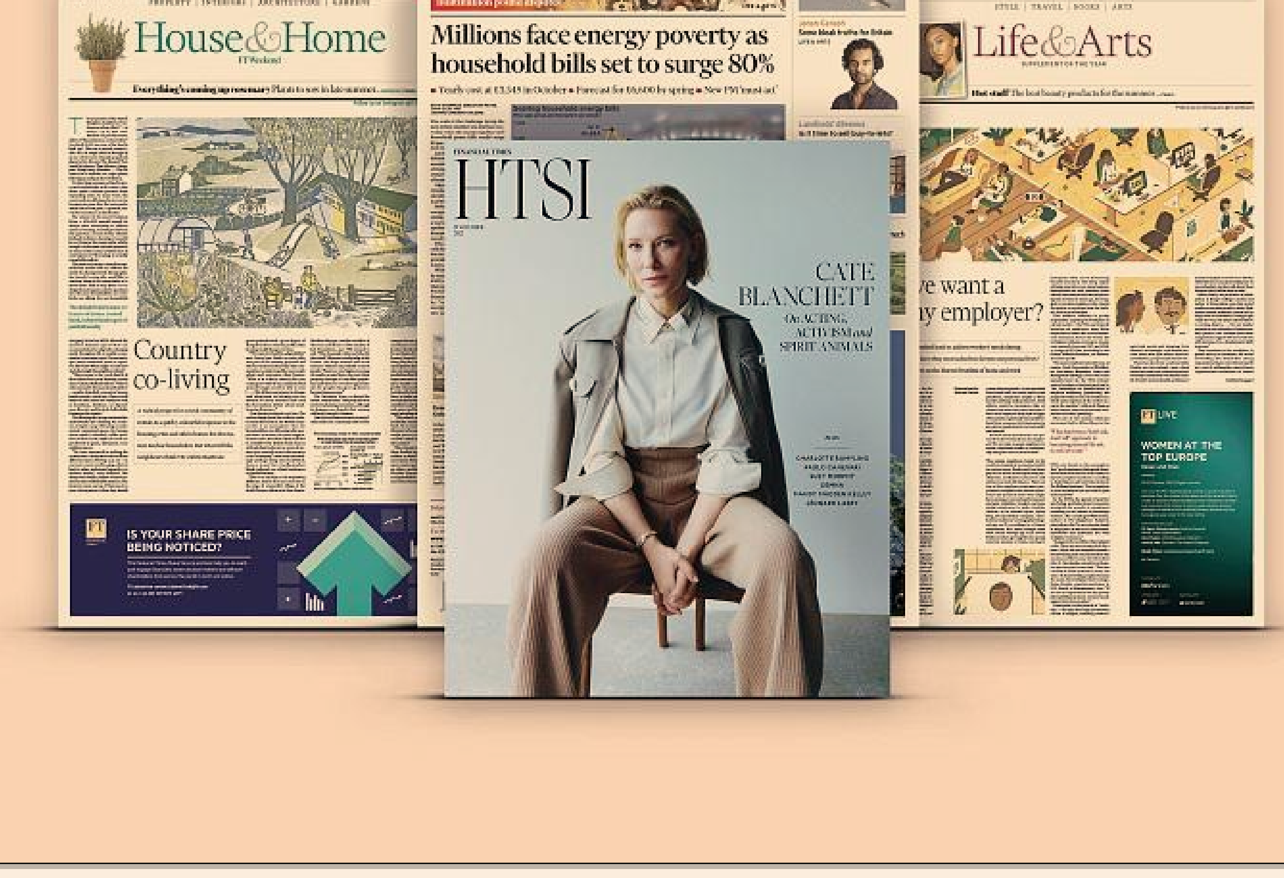

FT Weekend

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Medicines in 2022: innovation ovation

War and want dominated this year's headlines. But 2022 should also be remembered for pharmaceutical advances. The industry that created the Covid-19 vaccines is promising better treatments for cancer, obesity and Alzheimer's.

It is not just patients who are desperate for breakthroughs. The end of the cheap money era has left many biotechs with funding difficulties. Big drug companies are better placed. Their R&D spending grew 4.7 per cent in the five years to 2020, well ahead of their sales growth of 3.8 per cent, says Bernstein. They need to show this investment was worthwhile.

Hopes are high for Eli Lilly's new obesity drug Mounjaro. Like a similar drug from Novo Nordisk, it targets a brain area that regulates appetite. The investment bank SVB Securities forecasts the drug could generate as much as $26bn in annual sales in 2030.

In cancer, key drugs have expanded their reach. Merck's Keytruda now tackles 18 tumour types and is set to be the world's top-selling medicine next year, according to Evaluate Vantage. AstraZeneca's Lynparza has won EU approval for treating advanced prostate cancer. The group scored another success with Enhertu. A standing ovation in June greeted evidence of its success treating late-stage breast cancer.

Scientists also applauded Japanese drugmaker Eisai after data showed its new Alzheimer's drug slowed cognitive decline. There are questions over safety but the treatment could reward persistence in a field dogged by failure. Another example was the revival of an abandoned Alzheimer's treatment as a potential schizophrenia medicine by Boston-based Karuna. Trial results in August raised hopes for the first new treatment in over 50 years.

Drug breakthroughs will be buried deep in most media round-ups of 2022. But they will benefit humanity more in the long run than any superpower summit, film release or football match.

YouTube/NFL: pay to play

Streaming companies cannot stop spending on live sports. Amazon paid $1bn to be the provider of *Thursday Night Football*. Apple signed a 10-year deal with Major League Soccer. Now YouTube has agreed to pay about $2bn a year for rights to certain National Football League Sunday games.

Perhaps chief executive Sundar Pichai is a football fan? This is an expensive way for YouTube's parent company Alphabet to buy an audience. YouTubeTV costs $64.99 a month. If it charges a $25 add-on for NFL games it will need 1.85mn subscribers to break even. That means raising its subscriber base by about a third. It will hope to pick up subscribers from former *NFL Sunday Ticket* rights holder DirecTV.

There is a reason Apple and Amazon do not separate out profits and losses from their own streaming services. Alphabet reports only YouTube's advertising revenue (which is down on last year). Subscriptions for YouTube Premium and YouTube TV are included in "other" — a huge category.

Alphabet says the division's growth is led by YouTube. Given the increase was less than 2 per cent in the nine months ending September 30, this is not particularly impressive. Look at results published by rivals, and the brutal impact of competition is clear.

Disney's "direct to consumer" media and entertainment unit — streaming — reported an operating loss of $4bn on revenue of just under $20bn in the 12 months to October 2. Charging low monthly rates while buying pricey programmes is expensive.

Alphabet has the funds to compete. The NFL deal is equal to about 3 per cent of free cash flow last year. Using sport to lock in long-term subscribers may mitigate the slump in US audiences Netflix reports. YouTube has a seven-year contract with NFL.

But sports broadcasting is not an automatic money-spinner. See BT's exit from the game. The scrummage of competitors will make it tough for YouTube to break through.

Lufthansa/bonuses: moral compass error

Shares in Lufthansa fell sharply during the pandemic years. They dropped further in response to this year's energy price spike. Does the airline's rally since September accurately point to brighter horizons ahead? Not really.

Germany's national flag carrier raised its forecast for 2022 adjusted ebit by €500mn to €1.5bn this month. Citing "strong demand" for air travel, it said earnings were above expectations in October and November.

This optimism has rubbed off on Lufthansa's supervisory board. Reports this week said it was planning to give executive board members bonuses of up to €5mn for 2021 and 2022.

This is a bad look, even though the German government has sold shares acquired during a rescue whose cost has been repaid. The bailout is fresh in German minds. And prospects are weaker than directors imagine.

Lufthansa has some advantages. Its geographic split makes it a likely beneficiary of a reopening of travel in Asia. The balance sheet is stronger. Net debt, at less than two times forward ebitda, is under control. Free cash flow of €410mn in the third quarter of 2022 was up from €43mn a year before.

But Lufthansa's big cargo operations are vulnerable to a decline in air freight rates in 2023. Cargo accounted for 30 per cent of adjusted ebit in the third quarter. Typically, that proportion has not been more than a 10th.

Another issue is whether Lufthansa can revisit the profitability of even four years ago when its operating margin topped 7 per cent. Analysts expect not much more than 4-5 per cent in the next two years. Though jet fuel prices have fallen, staff costs remain high.

Intra-European flight bookings are sluggish, about 19 per cent below equivalent 2019 levels, according to Bank of America. European flights account for the bulk of Lufthansa's top line. That suggests strong updrafts are needed to lift Lufthansa shares. These trade in line with peers at 12.6 times forward earnings, says S&P CIQ.

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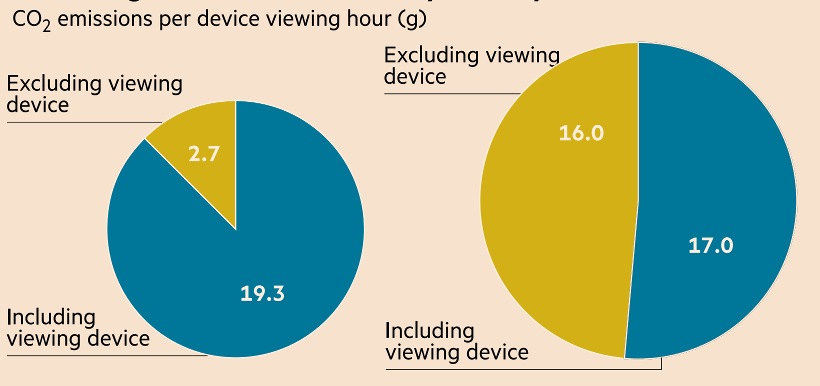
Carbon counter: don't shun the rerun



Sources: Ofgem; Carnstone Partners

From today, families around the world will flop on to their sofas for an intense week of TV viewing. In an ultra-environmental household, the choice of programme may be decided by the carbon cost of programming.

If you need any excuse to avoid the Meghan and Harry documentary on Netflix, here is one. A rerun of Hollywood classic *It's a Wonderful Life* has a much lower carbon footprint.

This month, new BBC director-general Tim Davie posited a future without broadcast TV in the next decade. He should think twice. Digital terrestrial broadcast television, or DTT, still provides the lion's share of viewing in the UK. About 43 per cent — and 26 per cent in the US — of what we watch is free DTT broadcasting. That proportion will not fall before 2034, according to Enders Analysis.

DTT is a greener option than streaming services, known as over the top television, or OTT. This is typically delivered by broadband. OTT requires more equipment, so energy consumption is 49 per cent higher than DTT, according to a report from UK regulator Ofcom.

Tot up longer hours watched on DTT. Add energy use by viewing devices. Total energy consumption figures then even out. But not greenhouse emissions: OTT shows emit 33g of CO_2 equivalent per hour, half as much again as DTT programs.

Older dramas and comedies are the most environmental option. The CO_2 generated by filming them decades ago has been spread over millions of viewings. If you do not fancy that, it may time for a family Christmas walk. This is an even greener option.

Central banks take top slot on year's list of horror stories

John Plender

The Long View

Equities, bonds, long-dated index-linked gilts, credit, crypto — the list of market horror stories in 2022 is extensive. Yet the biggest casualty of the year was surely the reputation of the big central banks.

In the period since the pandemic and Russia's invasion of Ukraine, their inflation forecasting has been dismally off-beam. And their response to the rapidly rising price level was slow and, in the notable case of the US Federal Reserve, initially timorous. Central banking conventional wisdom held that it was necessary to "look through" supply-side shocks, such as oil and gas price increases and closures of ports and semiconductor plants, because their impact on potential output was transitory.

Yet it is clear that the supply shocks and inflation arising from factors such as deglobalisation will bring about a lasting reduction in potential output. In such circumstances it is the job of monetary policy to tighten so that demand is brought into line with reduced productive capacity. One of the lessons of the cost push inflation of the 1970s after the first oil price hike was also that supply-side shocks can, in central banker jargon, de-anchor inflation expectations and produce second-round effects in labour markets.

The monetary policy mistakes since the pandemic may in part reflect a collective generational memory loss. Very few of today's central bankers were at the barricades fighting inflation after the oil shocks of the 1970s. Overconfidence after decades of low inflation was no doubt also a factor. As for the very timid initial move to tighten policy, it has to be said, in fairness, that it is notoriously difficult to assess an output gap in real time.

Lael Brainard, Fed vice-chair, points to the drawn-out sequence of shocks to the supply of labour, commodities and key inputs such as semiconductors. This blurred the lines between what constitutes a temporary shock, as opposed to a persistent one, to potential output.

The outcome of all this is that central banks have lost authority. At the same time, their belated policy tightening is damaging their own balance sheets because rising yields are inflicting big mark-to-market losses on the huge bond portfolios acquired since the financial crisis of 2007-09.

Not all central banks will report these losses — there is considerable variation in reporting practice. And many will argue that they are not profit-maximising institutions and that they can operate perfectly well with negative equity. They cannot go bust because they can print money.

> The recent monetary policy mistakes may in part reflect a collective generational memory loss

Yet there can be a tipping point where markets fear that financial weakness will lead to high or hyperinflation. And turning to finance ministries for fresh capital could reduce what independence they retain since the financial crisis. (This does not apply, incidentally, to the Bank of England, which sought and received an indemnity from the Treasury against losses in the crisis.)

Such is the uncertainty surrounding the advanced economies that there is a risk of both monetary overkill and underkill. And a move into recession in 2023 could expose financial fragilities arising from the long period of ultra-low interest rates in which investors searched for yield regardless of risk.

The working assumption among central bankers is that, since the crisis, bank balance sheets have strengthened but that risk has migrated to the non-bank financial sector. There is something in that, as the build-up of leverage in the UK pension system revealed in the September gilt crisis demonstrated.

But there are also big and very untransparent off-balance sheet risks in both the bank and the non-bank financial sectors, notably in relation to dollar debt in foreign exchange swaps, forwards and currency swaps.

In a paper for the Bank for International Settlements, Claudio Borio, Robert McCauley and Patrick McGuire point out that $85tn in outstanding obligations to pay dollars in these instruments exceeds the stock of dollar Treasury bills, repurchase agreements and commercial paper combined.

The obligations, which have risen sharply since the financial crisis, are mostly very short term and often involve maturity mismatches in institutions such as insurers and pension funds. The resulting rollover needs make for dollar funding squeezes, as happened in the financial crisis and in March 2020 at the start of the pandemic. These dollar payment obligations do not appear on balance sheets and are missing in standard debt statistics. The scope for trouble is obvious.

For the moment, a standard market view is that the central banks' "tighter for longer" mantra will keep bond yields rising and equities falling. But the big question is whether, in the event of a funding crisis, central banks feel obliged once again to return to asset buying to prop up markets and financial institutions, thereby weakening their anti-inflationary stance.

Such a U-turn would amount to central bank revisionism of a high order; in effect a return to morally hazardous asymmetric monetary policy. The worrying thing is that it is all too plausible.

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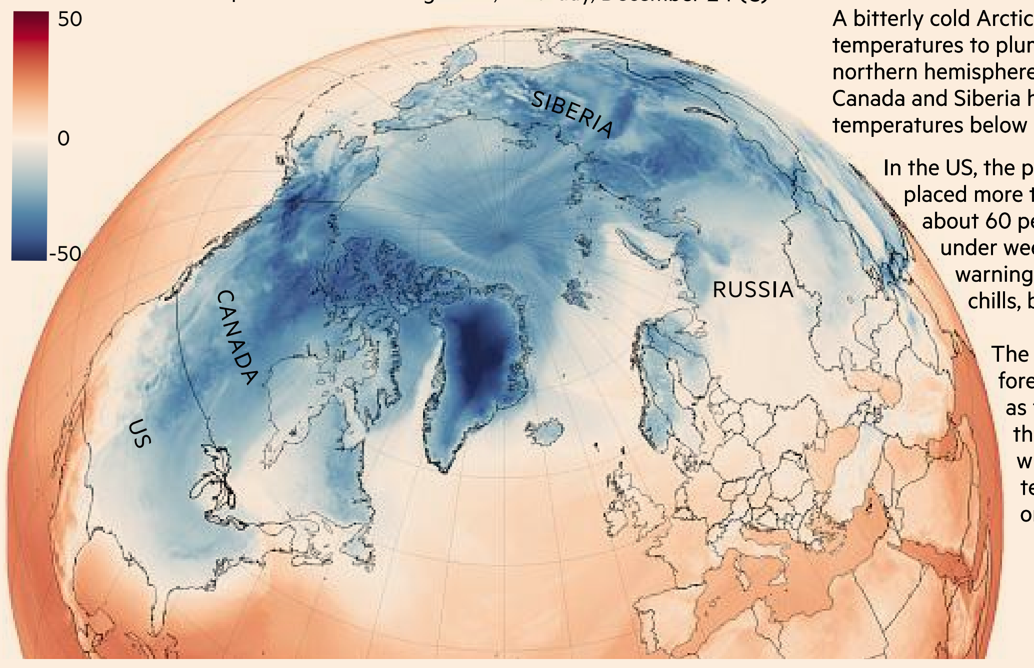
NIKKEI Asia The voice of the Asian century

Northern hemisphere experiences extreme Arctic temperatures

Forecast minimum temperature 2m above ground, Saturday, December 24 (C)



A bitterly cold Arctic air mass has caused temperatures to plummet across much of the northern hemisphere, where parts of the US, Canada and Siberia have recorded temperatures below minus 40C.

In the US, the powerful Arctic storm has placed more than 200mn people, about 60 per cent of the population, under weekend weather alerts with warnings of life-threatening wind chills, blizzards and ice storms.

The cold weather and hazard forecasts extend as far south as the US-Mexico border, the Gulf Coast and Florida, where near-freezing temperatures are expected on Christmas Eve.

Cartography: Steven Bernard
Source: Noaa
For the FT's latest climate change stories ft.com/climate

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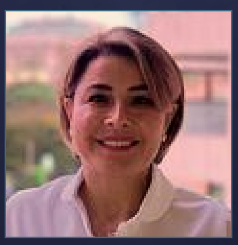
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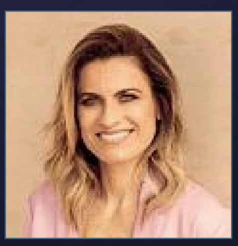
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SUPPLEMENT OF THE YEAR

Philosopher kings An exclusive seasonal short story by Brandon Taylor — PAGE 8

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A tale of two cities

Six months after moving from London to teach in north-east England, *Lucy Kellaway* has a new perspective on life — and what really matters

My life until now has been low on prayer. I grew up in a house where there was much scornful talk of God-botherers, but now I find myself in a job where barely an hour passes without my bothering God in one way or another.

Earlier this year I moved to the north-east of England and since September have been teaching at a Catholic school near Newcastle. At first, this praying didn't come naturally. I could just about say the Lord's Prayer, hard-wired in me since primary school, but even this was of limited help. In the first assembly my lone voice rang out with my favourite bit — "For thine is the kingdom, the power and the glory, for ever and ever, amen" — not noticing that everyone else had stopped, as Catholics do, after "deliver us from evil".

Now, I've got the hang of it and find I like praying. Saying things in unison is one of life's great but uncelebrated pleasures — it creates an instant state of togetherness and orderliness. I also very much like the words: peace, grace, hope and light. The last of these is particularly nice to say as there is so little of it up here, 55 degrees north, where on cloudy days around the winter solstice it doesn't really get light at all.

Although I don't feel any closer to Christ, I am being converted to a slightly different view of education — and, after a term's immersion in Geordie society, to a radically different view of how best to live. Life at my school is founded on the Gospel values which, I found after a spot of googling, involve the sort of thing even the most devout atheist should be able to sign up to: forgiveness, honesty, trust, family and, above all, love. I listened with disbelief in the first staff meeting when we were told it was our job to love all our students — especially the ones who were hardest to love. This was a departure from the successful academy school in east London where I trained, when staff would gather together in the name of no excuses, exam results and value-added scores.

Illustrations by Bill Butcher

This emphasis on love seems to me oddly profound, because from it everything else flows. If you force yourself to care deeply for every one of your students, you work harder for them, you want the best for them. All the other stuff I learnt in teacher training after leaving my job as a columnist at the Financial Times — differentiation and assessment for learning — seems a bit by the by.

It is not only the Gospel that is making me have a rethink. It is the experience of teaching and living 300 miles from the capital, my home for the past 63 years.

I can't remember quite what I expected when I moved. I knew about the north-south divide. I knew the south doesn't understand the north, and the north feels resentful of the south for hogging the money and almost everything else — which explains both why the north voted for Brexit and why we in the south didn't see it coming.

In my old borough of Hackney 78 per cent voted to stay in the EU; in the North East 58 per cent voted to leave. I've moved from the richest part of the country to one of the poorest, from somewhere where educational standards are among the best to where they are among the worst. I expected to feel alien; I expected to be treated with suspicion. But, more than six months in, and even though I still feel weird in my new setting, there hasn't been a whiff of suspicion, let alone resentment. My fellow teachers subject me to the same upbeat banter that they heap on each other and only very occasionally do they let slip that they find me odd.

The other day, I asked a colleague what he was up to at the weekend, and then followed it up with further inquiries until he protested: "Bloody hell, Kellaway, you ask a lot of questions!" By contrast, none of them have asked me anything, which at first I found a bit flat, but which I'm now starting to see the point of. They are simply taking me as they find me.

My students are doing likewise. No one laughs at my voice, or seems to be doing any judging, at least not in a negative way. They appear to have done some perfunctory googling about me, enough to hit on the sole fact that interests them. Early on one of my cheekier Year 12s came bursting into my class, saying: "Miss! There's a rumour going round about you: you're loaded."

He said he'd looked up my net worth online and found I had \$1.3mn. I told him I had no idea where the number came from and, anyway, it was all down to property prices. If you had bought a flat for £27,000 in London in 1985 and had a professional job for a few decades, then the likelihood was a net worth of more than £1mn. This was perfectly normal in the capital, where there were more than 800,000 dollar millionaires.

My tutorial on property prices did not go down well. He batted my words away — he liked the thought of being taught by a proper millionaire and didn't want me to talk down my fortune. In a way this should have been familiar. My students at all the schools where I taught in London shared the fascination with money and the desire to have more of it. But in every other way this new bunch of teenagers seem very different indeed.

The first difference is that in my last school barely 2 per cent were white; in this one it is about 90 per cent. The second is that they have lived in the same place for generations. One day I was talking about structural unemployment and giving an example of the region's defunct coal mines, shipyards and steel plants. On a whim, I asked them if all four grandparents were born nearby — almost three-quarters of the class raised their hands. I remembered a related question being put to my Hackney school where an assembly hall of students were asked if both parents were born in London. Out of 200, barely 10 put up their hands, most of them of African-Caribbean heritage.

The stats bear this out. According to the University of Essex's Understanding Society study, the North East is the least mobile place in the country, with 55 per cent of survey respondents living within 15 miles of their mother — more than three times as many as in the capital. And, if my students are any guide, this statistic is not about to change, as few of them plan to leave. They might go abroad for a bit (I tried to warn them that Brexit has made this harder), but after that they want to return home. No one has any interest in moving to London. They know they can't afford it, and don't fancy it anyway.

It seems to me that London's extreme mobility and the North East's lack of it explain so much about the differences between the two places and the best

> One of my cheekier Year 12s came bursting into my class, saying: 'Miss! There's a rumour going round about you: you're loaded'

and the worst things about each. This stability cuts across everything. It may account for the lack of curiosity. It may also lead to insularity and innocence in how they view the world. All London schoolchildren know a lot about different cultures; my students know only their own. When last year their beloved Newcastle United football club was bought by the Saudis, in a surge of joyous exuberance some of them took to the streets wearing tea towels on their heads. They were baffled when the club put out an announcement telling supporters to leave all tea towels at home. Any London teenager could tell them about cultural appropriation, but when I tried to explain, one shook his head in disbelief: "Miss, we were showing respect! We were saying thank you for buying our club."

A bigger difference concerns competition. In London every day 9mn people fight it out for scarce resources: for a seat on the Tube, a flat to rent, success, jobs, money or fame. Everyone is

Continued on page 2

Life

Note from the FTW editor

An exiled Russian friend this week sent me a drawing of the Kremlin accompanied by a message of hope that it would not be too long before he was able to show me around Red Square. I was thinking of this as I read the heartfelt appeal by Ukraine's first lady over Lunch for the world not to tire of reading about her country. It's a timely reminder. Today marks 10 months since the launch of this terrible war. It would be wonderful if in 2023 my friend were to be right and the first lady's fears unfounded, but few would bet on the former. For now all we can do is promise to keep chronicling the war. (FYI we have a *stunning* personal essay from Ukraine for our New Year's edition.)

I hope you have a festive break wherever you are. I write "wherever you are" with particular resonance as I was reminded only the other day of the global sweep of our readers. I was having dinner in a restaurant in a small town in the Karoo desert, South Africa. We were in semi-darkness as the power had been cut. A voice came out of the shadows: "Don't you work for the FTWeekend?" It was a reader who had watched our festivals online. An hour later I was in his house watching a World Cup match on television powered by his generator: the spirit of the FTWeekend!

Thank you as ever for reading us. **Alec Russell**

The quest for peace

THE ART OF LIFE

ENUMA OKORO

It's the day before Christmas, which for many of us means a combination of last-minute gift-wrapping and festive preparations. But my mind isn't on any of that. As is the case at this time every year, I'm thinking mainly about one person: Mary, mother of Jesus. And how, somewhere, a couple of thousand years ago, she was probably in the midst of what women have been doing since the beginning of time: sweating and labouring to give birth to her child. The one destined to bring about both conflict and peace.

I've been thinking a lot about Mary's body, the role it played in this delivery, the pain and the exhaustion, the utter trauma of it all. Traditionally in art, the nativity scene shows either an unusually pale or a blessedly flushed Mary gazing fondly at a rosy-cheeked suckling infant or an impish toddler holding holy court on her lap.

In those images Mary is meek, mild and calm. It is very difficult to find in art history any images that align with my own imagining of Mary as a bold, strong-minded, reflective and determined young girl who pondered the life-upsetting and dangerous things that were asked of her, before accepting the burden.

In my mind, Mary's labour and delivery seem of equal import to every other part of the Christmas narrative. Especially in this past year, when news story after story has highlighted the strength, courage and resilience of women the world over, from Ukraine to Afghanistan to Iran.

In "Virgin Annunciate" (1476) by Sicilian artist Antonello da Messina, we encounter a rare depiction of the Annunciation. There is no sign of the Angel Gabriel. A young, solemn Mary is alone, in the midst of reading, most likely the Hebrew holy texts, when she is disturbed by someone. Presumably Gabriel, but also by us, the viewer. With her left hand she pulls her blue veil closed at her chest, but her right hand reaches out as if to halt whoever is disturbing her personal time.

Behind her is a dark empty space that offers no clues as to where she might be or what her past history is. There is no halo, no nimbus, nothing suggesting that she has any more special ability than any other girl or woman (and we can be sure that she wasn't the only poor, young, unwed virgin in the world).

I love this image of Mary because I assume she has heard Gabriel's invitation, and the gesture of her right hand indicates she needs a minute to receive it. This Mary, who reads and thinks, seems in the midst of serious consideration. Will she accept the seed of peace in her womb, nurture it and deliver it into an unjust world? I try to imagine her contemplating all that is at stake in her "yes". Her pending marriage to Joseph, her reputation, her livelihood, not to mention the huge political implications: the child would be given the throne of King David, meaning vast social upheaval.

'Virgin Annunciate' (1476) by Antonello da Messina
De Agostini/Getty Images

I suspect she was counting the cost of her participation. I love the fact that she is looking directly at us, implicating us in Gabriel's asking. I cannot help but think of women across the world today who are doing whatever they can to seek justice and peace for themselves, their families and communities. They share with Mary that same mix of conviction, fear, strength and courage.

In the 1891 painting "The Nativity", American painter Julius Garibaldi Melchers offers a tender yet powerful depiction of the holy family shortly after Jesus is born. In a sparsely furnished, lantern-lit room, an exhausted Mary is collapsed on the hard bare floor. Joseph is peering down at the newborn child, in a posture of deep consideration.

We forget that Joseph, in this narrative, was probably the only one to assist in the labour. Surely he has his own fatigue. But he seems to be lost in both wonder and concern over this miracle baby. The infant lies in a makeshift bed. A radiant glowing orb of light encircles his tiny head illuminating his sleeping mother's face and Joseph's frame.

In this work we see just a fragment of the consequences of Mary's "yes". The toll on her body, the displacement from home and the lack of certainty about what to do next. But what this image also highlights for me is that Joseph said his own "yes" too. He said yes to walking alongside Mary. He was her ally in this.

Mary's strength is formidable, but she probably could not have done what she did alone. What would it mean for any of us to consider ourselves co-labourers for peace today, allies to the women whose bodies are on the proverbial and even literal front lines of conflicts? It's funny how the word "peace" is so calm and pleasant-sounding. But to achieve peace often requires so very much from us, a degree of selflessness, of sacrifice, of resilience and some ability to see a greater good beyond what might be comfortable or easy for us as individuals.

Over the past few months, the world has followed the uprising in Iran for women's freedom after 22-year-old Mahsa Amini died, having been detained by the "morality police". She had been arrested for charges of not wearing her hijab properly. Women in Iran and across the diaspora protested by taking off their hijabs, cutting their hair, and leading with the cry "Woman, life, freedom".

Iranian artist Shirin Neshat has a history of using her work to highlight the condition of women in her country. "Woman Life Freedom" is a public commission that was shown in Piccadilly Circus, London, and Los Angeles in early October. The work is an adaptation of her 1995 piece "Moon Song", part of the "Women of Allah" series, in which Neshat explored the complexity of women's lives and identities after Iran's 1979 revolution.

It shows a woman's hands, stretched out towards us, open-palmed. The left palm is inscribed with Farsi text, an extract from the writer Moniro

What would it mean to be allies to the women whose bodies are today on the front lines of conflicts?

Ravanipour's magical realist novel *The Drowned*, which Neshat says makes "an allegorical analogy between a storm taking place under the sea and the political climate on land". In the middle of the palm are two bullets, symbolic of the cost of struggle. The right palm is painted with a paisley motif and petals. For Neshat, this speaks to Iran's rich heritage. Above the hands, Neshat has added the rallying cry of the current protests: "Woman, Life, Freedom".

There is no peace without work and without some cost and that is not in some way born through the labour and the bodies of women. Even the God who chose Mary seems to recognise that. As we celebrate the season in our various ways, maybe we might reflect on what it could look like in each of our lives to be a peacemaker, to work towards peace. For what cause would we be willing to say "Yes"?

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Stanley Whitney
Paintings on Paper
Through 28 January 2023
Promenade 79, Gstaad
GAGOSIAN

A tale of two cities

Continued from page 1

striving for something — and immigration intensifies this. When families travel thousands of miles from their homes to make a better life for their children, they don't let them sit around doing the minimum.

The Hackney schools I taught in were monuments to striving and, as a result, the children did very well indeed. Last month, I did a Zoom call with some of my most driven students and heard how they were applying to Oxbridge and the London School of Economics and Russell Group universities. I felt a pang for my current students who, despite going to one of the best schools in the area, have few such ambitions. They mostly do the work I set them and mostly do it more or less adequately. But, for most of them, that's as far as it goes.

Early on, in a bid to change this, I told my Year 12s that to do well at A-level they would need to do six hours' independent work a week per subject. The class gawped in disbelief. Patiently, one explained he couldn't do that because he worked weekends in a restaurant in the Metro Centre and needed to see his mates and watch football.

I replied that, in that case, the best grade he'd get would be a C — or maybe a B if he was very lucky. "What's wrong with a B?" he said. "I'd much rather get that than spend six hours every week on business studies."

The wind was taken out of my sails. I had nothing to say in reply.

Some students are aiming higher. One tells me his dad has always pushed him, and he wants to go south to a top university. "I have friends who are so clever — cleverer than I am. But they don't care about going to uni because they don't have the motivation or the passion. They don't want to challenge themselves. They are in their comfort zones and they don't want to get out."

He sees it as a shame and a waste — and that's what I used to think. But now I'm wondering if it might not be a sign of failure and culpably low aspirations if no one wants to go to the best universities or move to London to make their fortune. Couldn't it be a sign of the opposite — of a close-knit community where people stay not because they lack imagination but because they like it there?

I'm reading Fiona Hill's book about growing up in poverty in nearby Bishop Auckland and going to Harvard and ending up at the State Department. Her dad, a miner-turned-hospital porter, once said to her, "There's nothing for you here", and from that came the title. But for my students, I think there are a lot of things for them here. They want to be midwives and builders and primary schoolteachers and make-up artists and police officers. One of them wants to study law at Northumbria University — for which he needs, and will get, a B. I don't think he'll ever make senior partner in a magic circle law firm, but so what?

'What's wrong with a B? I'd much rather get that than spend six hours every week on business studies'

Who is to say these aren't good ambitions? And who can fail to admire the lack of stress in getting there? Even in these past six months, I have been acutely aware of the lifting of pressure. Every day for five years when I taught in the capital my stomach tightened as I went through the school gates. Now, I park my car outside after a nine-minute drive and go inside, no clenching of the stomach. In my current school the teachers seem happy and have no plans to quit. Many have taught there for 20 or 30 years and educated the parents of the current students. Indeed, teacher turnover is so low that I very nearly didn't get a job. When I started looking last spring, there were 120 vacancies for business studies and economics teachers in London; in the whole of the North East there were only three.

In the highest-achieving London academies a quarter of the staff quit every year — not just because they can't afford flats but because they are wrung out by the scale of the work. This is the trade-off: this sort of system gets the best possible GCSE results, but the teachers, and sometimes the students, get burnt out achieving it.

Last week at school when the third advent candle was lit — which I now know represents joy — it struck me that this is something that Geordies, despite the cold and dark and lower incomes, are really rather good at. At least they seem to be better at it than I am.

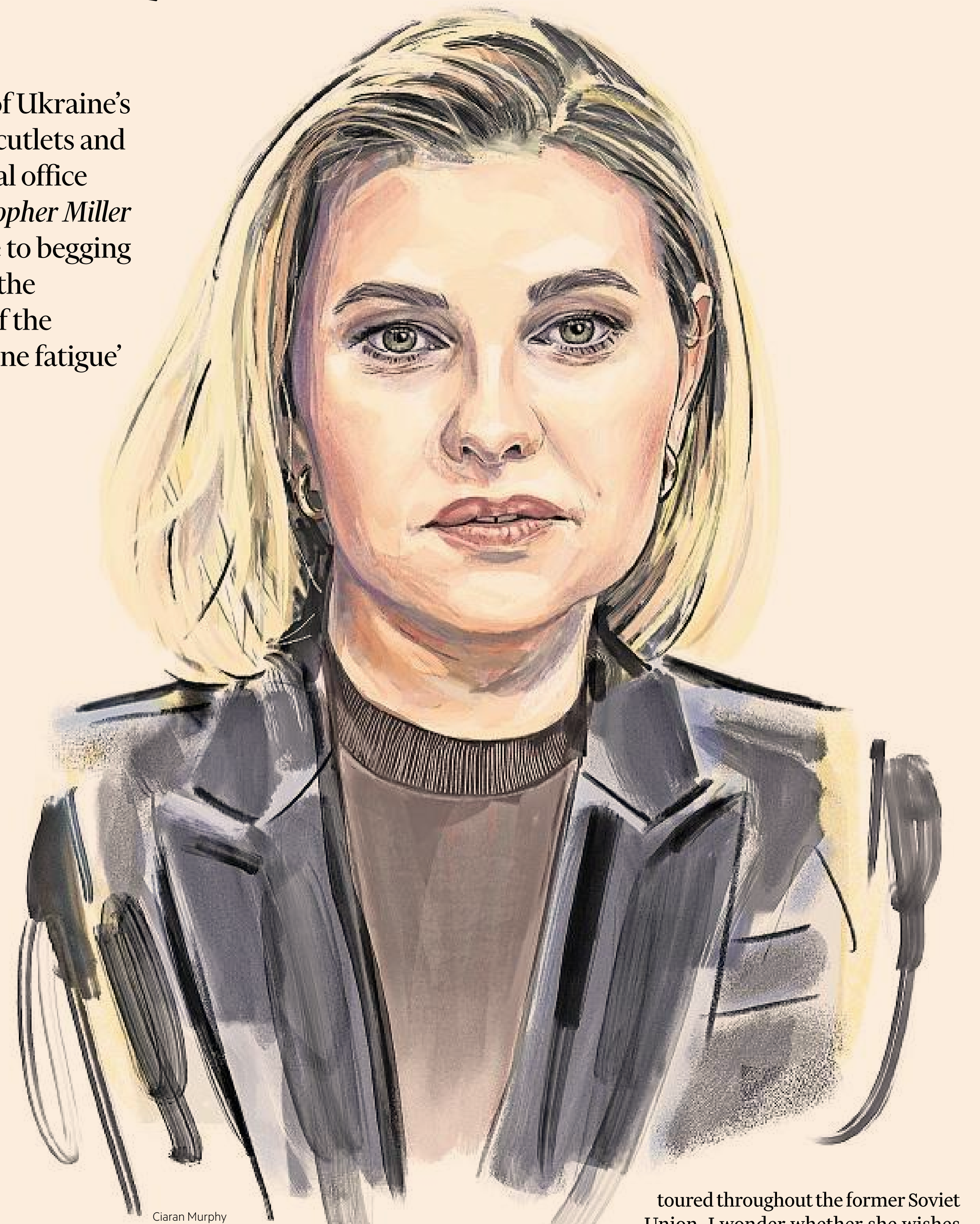
In the week before Christmas, when everyone was winding down for the festive season and preparing for a whole-school outing to the local cinema complex, I set my students some homework, which I said I'd mark the next day. One of them, a boy who is not in the slightest hard to love, piped up: "Miss, I think you should relax. Then you'd enjoy your life more." Straight back, I told him that I enjoyed my life very much indeed. But, as I prepare for my first Christmas in the North East, I'm starting to wonder: what if he's right?

Lucy Kellaway is an FT contributing editor and co-founder of Now Teach

Lunch with the FT Olena Zelenska

'We need to use every opportunity to be heard'

On February 24, the first lady of Ukraine's life changed for ever. Over fish cutlets and cabbage salad at the presidential office canteen in Kyiv, she tells *Christopher Miller* about going from writing satire to begging for missiles, what happened at the Zelenskys' home on the night of the invasion and the risks of 'Ukraine fatigue'



Ciaran Murphy

Two soldiers armed with military rifles step into the canteen. They survey the people lunching on borshch, dumplings and sausage rolls before locking in on me and assessing whether I might be a threat to my guest, the first lady of Ukraine. A quick evaluation seems enough to convince them that I pose no danger. Their approval is sealed with a couple of fist bumps.

A moment later, Olena Zelenska strolls in with two young assistants, one armed with a hair brush, the other a lint roller. They remove her shawl to reveal the first lady in a crisp blue pantsuit over a brown sweater. One of the assistants gives her hair a brush to make sure it is neatly coiffed and Zelenska tucks a strand of it behind her ear, revealing a gold hoop earring. I notice that she is trembling. "It's so cold outside," she says, offering her hand. I shake it gently and feel that it is almost frozen to the touch. "Winter is coming," she mutters.

We are inside the presidential office's canteen on a Monday afternoon. The place is a fortress, with metal detectors, sandbags piled in front of the windows, and snipers' perches. It's dark except for a few lanterns placed on the floor.

I begin our conversation with a question that many Ukrainians have come to loathe since Russia launched its full-scale invasion of their country in February, brutalising and killing them and destroying their cities. But I ask it because I am curious how she will answer.

"How are you?"

"Well," Zelenska sighs in English before switching to Ukrainian to better express herself. "On the one hand, it's a simple question. But on the other hand this is the kind of question I don't exactly know how to answer. We are all living in a period in which it is hard to assess whether we are OK or we are not."

Zelenska and I are meeting three days after Ukrainian forces liberated the south-central provincial capital of Kherson following almost eight months of Russian occupation. It's one of Ukraine's biggest military triumphs since the invasion began.

"We feel something close to euphoria because this is a great victory for us," Zelenska says, adding that she spent much of the weekend watching videos of Ukrainian troops entering Kherson and the emotional reunions between families and friends. "But I would say that we should also be very cautious. When the people met our troops in Kherson, of course they were very happy," she says. "But as for the people in Kyiv who I know, they are a bit afraid to be too joyful, because we don't want to put a jinx on this luck we are having."

Soviet apparatchiks once strolled this building when it housed the central committee of the Communist party of Ukraine. The canteen feels almost stuck in that time. The tables are covered in pressed white tablecloths and the chairs are wrapped with brown covers. Large drapes cover the floor-to-ceiling windows. Portraits of plated salmon, kebabs and boiled potatoes flecked with dill hang on the walls.

If the president's policies and digital savvy have transformed his administration and Ukraine's government into a 21st-century European country, they haven't spread to the dining hall. In any case, it's cosy and warm and Zelenska and I have the place mostly to ourselves.

"So, shall we get some lunch?" the first lady asks in slightly accented English. Three women in white hats and striped aprons greet her, and ask what she'd like from the buffet of traditional Ukrainian dishes. She opts for a cabbage salad with corn and parsley doused in sunflower oil and a fish cutlet.

I ask for the same but with a scoop of mashed potatoes. Zelenska orders black tea and I get a black coffee and a muddy-looking glass of *uzvar*, my favourite Ukrainian drink, made with dried and smoked fruits and spices. The first lady begins to bring out her wallet to pay before I stop her and insist on picking up the tab — 171 Ukrainian hryvnia, or less than £4.

THE PRESIDENTIAL CANTEEN
Office of the President of Ukraine, Bankova St, 11, Kyiv, 01220

Fish cutlet x2
Cabbage salad x2
Mashed potatoes
Black tea with lemon
Black coffee
Uzvar
Total 171 Ukrainian hryvnia (£3.81)

We don't know it yet but we are meeting less than 24 hours before Russia will fire 96 missiles at targets across Ukraine — the biggest aerial attack since the invasion began — temporarily knocking out power and water to much of the country. "We are, I would say, more worried about our enemy because of his losses, because of his defeats," says Zelenska. She is talking about Vladimir Putin without mentioning his name. It's something Ukrainians have begun doing regularly, along with using a lower-case r when writing the name of his country.

"We know that he will launch another missile attack against our cities. So our happiness has limits, because we know that these victories are not the end of the war and we've got lots of things to do still." And, she adds: "After each de-occupation of a city, unfortunately, we find awful things." When Putin's forces fled the towns of Irpin, Bucha, Hostomel and others near Kyiv in April, bodies of civilians were found in the streets, piled in basements and buried in mass graves. There was evidence that many had been tortured and some raped before being coldly executed.

"We are afraid to find those things again in Kherson's case," she says. Sure enough, on the day that we meet, authorities and journalists find more disturbing accounts of torture, disappearances and killings.

Zelenska was born in the industrial city of Kryvyi Rih in 1978, growing up in the post-Soviet 1990s, a period marked by gangster capitalism and extreme inflation. Her father taught construction at a university, while her mother headed an engineering department at a local factory. The family spoke Russian at home but, like most Ukrainians, they were bilingual.

She and a young funny boy named Volodymyr Zelenskyy crossed paths at secondary school but didn't become close until they went to the same university, where she studied architecture and he dabbled in law. With friends from the neighbourhood where they grew up, they formed a comedy troupe. In 2003, the couple married.

While her husband was the face of their entertainment company, Zelenska preferred a behind-the-scenes role, writing skits that the group performed during their popular live shows, which toured throughout the former Soviet Union. I wonder whether she wishes she could go back to writing jokes, like her old friends at the sketch troupe. "They are supporting society by helping to keep up morale with humour," she says. "But I wouldn't be able to do that now because I am in a different emotional state now. I don't know whether I can go back to feeling like I did before."

Later she wrote sketches and scenes when the group began making television programmes, including the hit political satire *Servant of the People*, in which Zelenskyy plays an everyman hero who accidentally becomes president — and which helped propel him to the real-life role in 2019.

Zelenskyy announced his candidacy for Ukraine's top political office on New Year's Eve, as the clock struck midnight on December 31 2018, in a highly coveted television spot traditionally reserved for the current president. To call it a coup would be an understatement. What's more, he hadn't told Zelenska he was planning it.

"What was your first reaction to your husband's announcement?" I ask.

"I was angry. He could have told me. When I heard it, I think my facial expression was the same as it was in the breakfast comment meme," she says wryly, referring to a screenshot taken from a joint interview the couple gave to CNN's Christiane Amanpour, which went viral on Ukrainian social media. In response to a question from Amanpour, Zelenskyy lamented that, since the invasion began, nobody makes him breakfast any more. As he grinned, Zelenska flashed him a glare that led to countless online jokes.

When I ask about her husband's comment, Zelenska rolls her eyes. "First of all, he lives in the presidential office. So his breakfast is brought to him by the same people who bring him lunch and dinner," she says. "But I think he just wanted to emphasise that he misses this normal element of family life, since we used to have breakfast together every morning. And actually, he liked to cook breakfast himself."

"Is he a good cook?" I inquire.

"Yeah! He makes perfect fried eggs. And often he made them for me," she says. "I wouldn't say that he would be totally successful making borshch."

Zelenska tells me she longs for those "normal" days. "We lack normality in everything now," she says, explaining that their time together is always fleeting. "Anytime we talk, we think about how little time we have and when we need to part."

Zelenska's life as she knew it changed shortly after 4am on February 24. She awoke to the muffled roar of explosions on the edge of Kyiv and noticed her husband was already up and dressed in a suit and tie. When she asked what was going on, he answered simply: "It's started."

I inquire how the president and first lady could seem so unprepared for an invasion that everyone had been saying for weeks was inevitable. "I wouldn't say that what happened was unexpected, but I would say that we still felt the shock that it really happened," she says, adding that they had not made any plans for what to do in this case. "We did not discuss any of the details, what I should do with the children, what he should do."

Zelenska quickly packed a bag and then woke the children, Oleksandra, then 17, and Kyrylo, nine, telling them to do the same. After hours in a bunker, the three of them reunited with Zelenskyy before being taken to an undisclosed location, where the family would remain for almost three months before resurfacing.

When Russian forces were pushed back from Kyiv, Zelenska returned to her duties and public life. Her first appearance was a meeting with the US first lady Jill Biden to tour a school in western Ukraine.

Her days now begin in Kyiv at 7am, getting Kyrylo off to school, "if there are no air raid sirens", she says. Then she heads to the gym for a quick workout before changing into her professional clothes and going to the office. Her workday is a deluge of meetings and interviews. "Sometimes I'm lucky to get lunch with my husband."

> 'We lack normality in everything now . . . Anytime we talk, we think about how little time we have and when we will need to part'

Before the invasion, Zelenska focused on advocating for children with special needs, reforming school meal programmes and campaigning against domestic violence. While passionate about these causes, she tells me, she was uncomfortable with the public aspect of her job.

"I had to study," she says. "I had to consult with coaches on my speaking skills, because I feel that there is a lack of force in my voice. For instance, that I don't speak loud enough, or speak with a lack of energy. Because when you are making a public speech, you need to express energy."

She recalls one of her early public speeches, given to a group of students at a conference. She was "nervous" and "my voice somehow vanished", she says. Watching it back later, she didn't recognise the sound of her own voice. "It definitely was not mine."

Sitting here with me now, after dozens of public appearances and interviews, Zelenska speaks confidently, rarely breaking eye contact, but still softly and carefully, conscious of the weight of her words. She has transformed herself into a first lady, but from what I've been told by her friends and people inside the presidential office, including her husband, this is still Olena — professional, thoughtful, calm, modest. With her husband largely confined to his presidential suite, she has flown across the world on his and the Ukrainian people's behalf to drum up support.

She visited the UK for the funeral of Queen Elizabeth II, who she said had "shared the values Ukraine stands for today". In Washington, she became the first spouse of a foreign leader to address a joint session of Congress. Her speech was personal, emotional and affecting. She shared horrific tales of Russian war crimes against Ukrainian civilians, including children, and showed lawmakers gut-wrenching images of the aftermath of missile attacks. And she pleaded for weapons.

Asking for missiles felt strange, she admits. "I do understand that it goes beyond the standard and formal understanding and perception of the function of the first lady," she tells me. "But we know in this situation we need to use every opportunity to be heard."

At home, Zelenska is leading efforts to address the impact that Russia's war is having on Ukrainians' mental health, an issue the World Health Organization has described as being "on a scale unprecedented in Europe since the end of World War II".

Through her eponymous foundation, and in partnership with Ukrainian NGOs and the WHO, Zelenska is teaching first responders, military medics, pharmacists, teachers and social workers to moonlight as counsellors, working to break a stigma that has existed in Ukrainian society for generations.

"I would like to create a system that will help people with their mental health, first of all to make mental healthcare accessible, and secondly, comprehensible," she says.

She is also working to repair and rebuild some of the roughly 300 schools that were destroyed and about 2,500 that were damaged by Russian missiles and artillery, while also scrambling to secure special equipment for medical facilities, such as incubators for premature babies. "We desperately need these," she adds.

We've spent more than an hour talking before we realise that we haven't even cut into our food. "Shall we eat?" Zelenska smiles. "I'm hungry." Her assistant offers to see about having her cutlet reheated. But the first lady shrugs it off. "It still tastes great."

She's comfortable now, and switches from Ukrainian back to English. We talk more about food and our mutual dislike of *holodets*, a jiggly meat jello traditionally served at Christmas and New Year.

I thank her for her time and she thanks me for mine. Her troops converge, wrapping her back up in her shawl and standing guard beside her. Before she leaves, she asks that I make sure people read this interview, adding that she's concerned that many are suffering from "Ukraine fatigue".

"We wouldn't like for people to get used to what is happening in Ukraine," she says. "Unfortunately, we can't turn off the news and have this problem disappear. War is our life now."

Christopher Miller is the FT's Ukraine correspondent

FT FINANCIAL TIMES

YOUR FINANCIAL TIMES DURING THE HOLIDAY PERIOD

Dear readers,

As we approach the end of the year we wanted to let you know that the Financial Times will not be published on the following dates:

Monday 26 and Tuesday 27 December
Monday 2 January

Thank you for your continued support and wishing you a wonderful holiday season from all of us at the FT.

The Life&Arts Quiz

The who, what, why of 2022

What was the dance number Elon Musk wrote? Which Oscar nominee returned to Ramsay Street? And who had the booziest Lunch with the FT? *Ludovic Hunter-Tilney* tests your knowledge of the year's events

Illustration by Tim Marrs with pictures from Eyevine, Getty Images André Pattenden, Tom Jamieson Getty Images; Backgrid; Adobe Stock

1 Which pop star's album was "solid enough" in the FT's estimation but not up to their previous "lofty standards". It went on to break records on Amazon Music, Apple Music and Spotify for most streams in 24 hours ever, and made the star the first person in US chart history to claim all 10 places in the Billboard top 10 songs. Who?
A: Harry Styles
B: Drake
C: Taylor Swift
D: Bad Bunny

2 According to a peer-reviewed paper by MIT researchers, what is the best starting word for online puzzle Wordle?
A: audio
B: salet
C: crane
D: depot

3 The first computerised renderings were presented in July for a projected high-tech city in a desert. Called Neom, it aims to house 9mn people in a strip of buildings stretching for 170km, connected by high-speed train and encased on either side by 500-metre-high mirrored walls. Where is it being constructed?
A: Kazakhstan
B: United Arab Emirates
C: China
D: Saudi Arabia

4 A video posted to Tesla's Instagram account in August showed four of the electric cars lined up in a warehouse flashing their lights in time to dance music. The soundtrack for the vehicular rave was a progressive house music track composed by that man of many parts, Elon Musk. The billionaire entrepreneur and occasional DJ originally released the song in 2020. What is it called?
A: "Go Hard or Go Home"
B: "Don't Doubt ur Vibe"
C: "Swagging wit da Space Crew"
D: "Free the Bird"

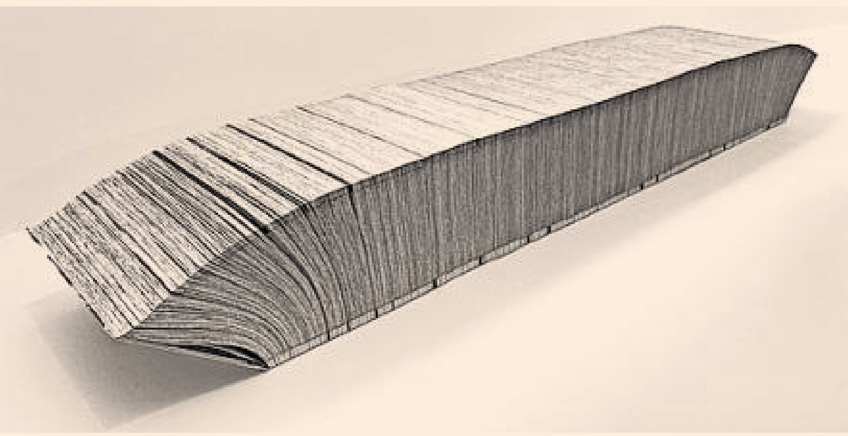
5 Closed captions are subtitles for deaf and the hard of hearing, which describe onscreen sounds as well as transcribe dialogue. Which television show this year included the closed-caption description: "tentacles undulating moistly"?
A: *Stranger Things*
B: *The Lord of the Rings: The Rings of Power*
C: *Obi-Wan Kenobi*
D: *House of the Dragon*

6 This year the set (pictured below) built by Sergio Leone in 1968 for his spaghetti western *Once Upon a Time in the West* was put on sale for €2.8mn. Where is it?
A: Spain
B: Italy
C: Greece
D: Mexico

7 The Cambridge Dictionary word of 2022 is "homer". For Merriam-Webster, it is "gaslighting". Collins Dictionary judges it to be "permacrisis". Oxford Languages has plumped for "goblin mode". Which of them derives from a 1938 play by the British playwright and novelist Patrick Hamilton?
A: Homer
B: Gaslighting
C: Permacrisis
D: Goblin mode

8 "We're just three dudes, and we're just making stuff," artist Thomas Houseago told HTSI in October. He and the two other dudes spoke about their joint art exhibition *WE*, held in Finland. One dude was exhibiting his sculptures but is better known as a film star. The other dude was showing his ceramics but is better known as a rock star. Who are they?
A: Hugh Jackman and Neil Young
B: Brad Pitt and Nick Cave
C: Sylvester Stallone and Jarvis Cocker
D: Leonardo DiCaprio and Michael Stipe

9 In September, the longest book ever (below) was published as a limited edition, a single volume designed by Belgian conceptual artist Ilan Manouach — so physically big, it is impossible to read. On sale for €1,900, it comprises every panel of a best-selling manga comic-book series, Eiichiro Oda's *One Piece*, which began being published in 1997. How many pages does the monster book, pictured below, have?
A: 21,450 pages
B: 210,450 pages
C: 2,104,500 pages
D: 21,045,000 pages



10 Here (pictured right) is Kim Kardashian at the Met Gala in May, wearing a dress that belonged to Marilyn Monroe. Controversy arose when it was claimed that the historic garment had been damaged, which Kardashian and the owners of the dress, the entertainment franchise Ripley's Believe It or Not!, denied. On which occasion did Monroe wear it?
A: Performing a show for US troops in South Korea
B: Standing on the subway grate in *The Seven Year Itch*
C: Singing "Happy Birthday" to John F Kennedy
D: Dancing in *Gentlemen Prefer Blondes*

11 During a gig in November in Dublin, Bob Dylan made a rare comment on stage to salute the presence in the audience of a fellow songwriter who also possesses a distinctively rough voice. "One of our favourite artists," Dylan said, "we hope he makes another record soon." Who?
A: Van Morrison
B: Bono
C: Tom Waits
D: Shane MacGowan

12 Nicknamed the Festival of Brexit, "Unboxed: Creativity in the UK" featured 10 nationwide projects running from March to October, which attracted adverse publicity for its feeble profile, despite a budget of £120mn. It was inspired by the 1951 Festival of Britain, which had a £12mn budget. What, according to the Bank of England's inflation calculator, would that be worth in today's money?
A: £120mn
B: £199mn
C: £220mn
D: £299mn

13 London rapper Little Simz won this year's Mercury prize for her independently released album *Sometimes I Might Be Introvert*. But her year also had a lowlight when she cancelled an upcoming US tour, citing — what?
A: Too financially risky
B: Fear of flying
C: Stage fright
D: Poor ticket sales

14 Long-running Australian soap opera *Neighbours* ended with a star-studded finale in July in which all the houses on Ramsay Street were put up for sale bar one (although in a real-life plot twist, streaming service Amazon Freevee subsequently bought the soap and announced its return in 2023). Which Oscar-nominated star was among the returnees?
A: Margot Robbie
B: Guy Pearce
C: Kylie Minogue
D: Jason Donovan

15 "Would you ask Gene Kelly why he does all his own dancing?" Tom Cruise remonstrated during a Q&A event at Cannes in May. Cue standing ovation from the cineastes. What was he asked?
A: Why he does his own sex scenes
B: Why he does his own stunts
C: Why he produces his films as well as starring in them
D: Why he does his own make-up

16 Which national artform inspired the design of Japan's football kit at the World Cup, pictured right?
A: Origami
B: Calligraphy
C: Manga
D: Woodblock prints

17 This year was the 400th anniversary of Molière's birth. In the foyer of the Comédie Française in Paris is a battered armchair, which the playwright-actor died in just after playing the lead role in one of his plays. Which one?
A: *Tartuffe, or the Imposter*
B: *The Bourgeois Gentleman*
C: *The Imaginary Invalid*
D: *The Misanthrope*

18 Pictured right is an example of 2022's most popular food trend on TikTok, its hashtag drawing an estimated 3.4bn views. What is it called?
A: Fluffy meringue
B: Blue macaroon
C: Blueberry sky pie
D: Cloud bread

19 Following the summer release of her album *Renaissance*, Beyoncé received nine nominations for next year's Grammy awards. She has 28 Grammys to her name already. If she wins four more, she will overtake which artist to become the most awarded figure in the US ceremony's history?
A: Georg Solti
B: Paul McCartney
C: Jay-Z
D: Quincy Jones

20 Allowing for two units of alcohol per drink, how many units were notched up in 51 Lunches with the FT from January 1 (former royal lady-in-waiting Anne Glenconner) to December 3 (Afghan activist Zarifa Ghafari)?
A: 60 units
B: 160 units
C: 260 units
D: 360 units

21 Who was responsible for the most vinous Lunch? (An extra glass of wine was ordered when the Lunchee was distressed to see the waiter decant the remainder of the initial bottle into the interviewer's glass.)
A: Orhan Pamuk
B: Michael Gove
C: Hillary Clinton
D: Piers Morgan

22 Three of the scenarios below in video games that were reviewed this year by the FT. One is made up. Which is it?
A: The player is Bayonetta, a witch armed with a pair of pistols who battles to save the multiverse
B: The player is Stryker, a gun-toting gumshoe who fights mobsters in the city of Peccadillo
C: The player is a nameless ginger cat in a future world where the humans have all disappeared
D: The player is Andreas Maler, a 16th-century journeyman artist in a Bavarian village who has to solve the murder of a nobleman

23 "You wake up with the answer to the question that everyone asks. The answer is Yes, and the answer is Just Like Here But Worse," the narrator of Shehan Karunatilaka's *The Seven Moons of Maali Almeida* tells us at the start of the Booker Prize-winning novel, "a powerful evocation of Sri Lanka's brutal past", in the FT's estimation. Where exactly has the narrator, a war photographer and chronic gambler, woken up?
A: In no-man's-land during the Sri Lankan civil war
B: In the afterlife following his death
C: In another person's bed after a drunken binge
D: In a Tamil refugee camp in India

24 The warbling vocalist (pictured below) massacring George Thorogood and the Destroyers' "Bad to the Bone" while disguised as a jack-in-the-box figure on *The Masked Singer* on US television in April was wrongly guessed as Joe Pesci. The real identity of the mystery contestant caused at least one judge to walk out. Who was the singer?

A: Kellyanne Conway
B: Rudy Giuliani
C: Steve Bannon
D: Donald Trump Jr

25 This year marked the centenary of the death of Alessandro Moreschi in Rome. The singer was notable for being — what?
A: The first singer of a record selling over 1mn copies
B: The only castrato soloist to be recorded
C: The lowest-known bass in the history of recorded music
D: The singer believed to have held the longest sustained note in the history of recorded music

26 A member of the audience at the Royal Opera House's production of Handel's *Alcina* in London received a lifetime ban in November for doing what?
A: Pushing over another member of the audience in an argument about eating crisps
B: Talking loudly over the arias
C: Dancing repeatedly
D: Heckling a child singer

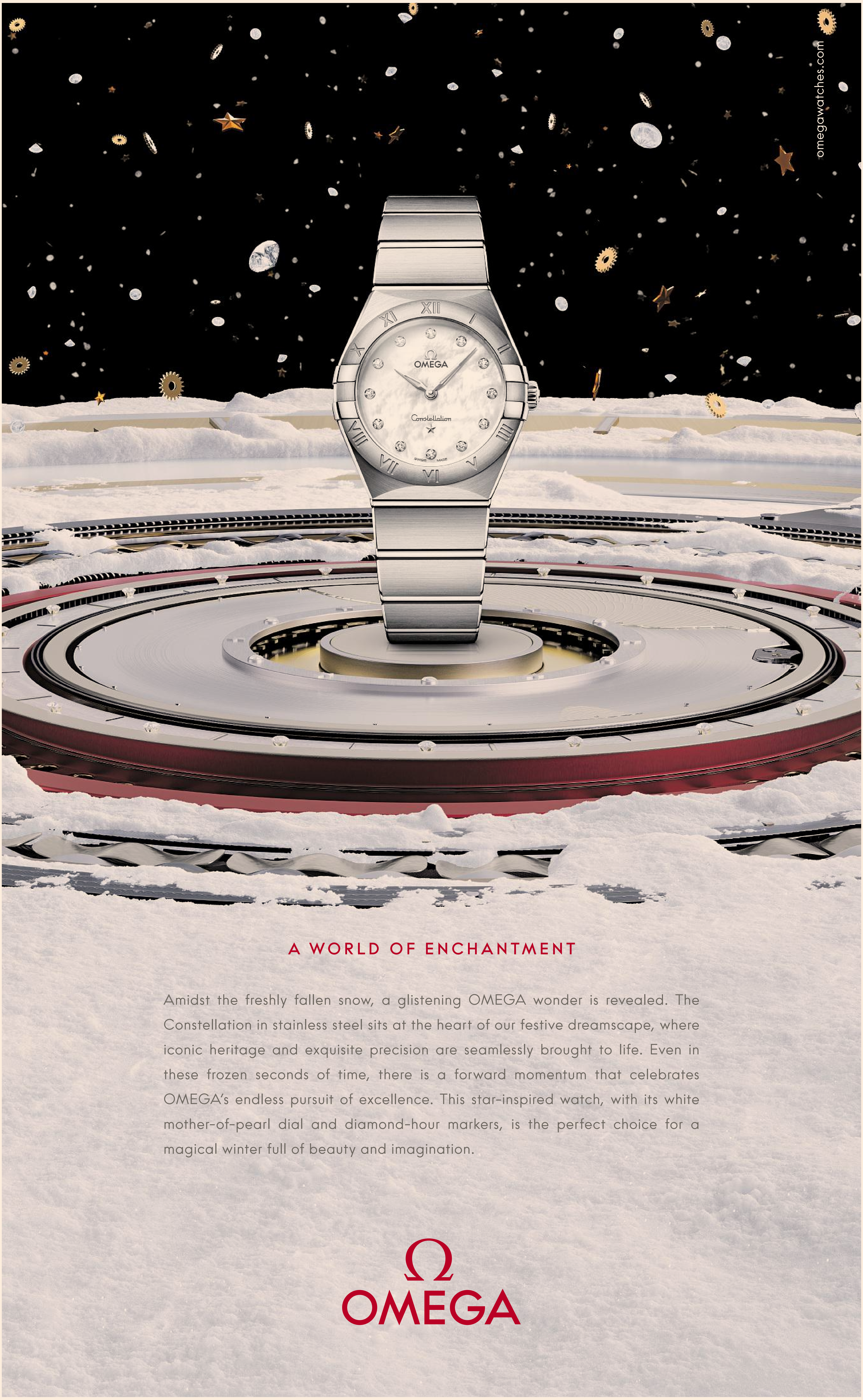
27 The Macklowe collection of art sold for $922mn at auction following the divorce of New York property tycoon Harry Macklowe and his wife Linda Burg. It was the most amassed by an art collection until November, when a deceased billionaire's collection went under the hammer and reached $1.5bn. Who?
A: Dietrich Mateschitz
B: Steve Jobs
C: Paul Allen
D: Sheldon Adelson

28 What was notable about Bella Hadid's dress at Paris Fashion Week in September, pictured left?
A: It was made of a liquid fabric that was sprayed on to her
B: It was made of a heat-sensitive fabric that changed colour according to the room's ambient temperature
C: It was made of a genetically modified cotton fabric that won't rip or wear
D: It was made using a 3D printer

29 Between July and September, YouTube removed 1.7mn videos originating from a particular country for violating content guidelines, the most in the world by nation. Where?
A: India
B: Brazil
C: United States
D: Russia

30 Four of the top five spots in Google's most searched-for people in 2022 were actors: Johnny Depp (1st), Will Smith (2nd), Amber Heard (3rd), Chris Rock (5th). Which politician joined them in 4th place?
A: Vladimir Putin
B: Joe Biden
C: Donald Trump
D: Boris Johnson

To discover the answers, turn to page 17


omegawatches.com
OMEGA
Constellation
SWISS MADE
A WORLD OF ENCHANTMENT
Amidst the freshly fallen snow, a glistening OMEGA wonder is revealed. The Constellation in stainless steel sits at the heart of our festive dreamscape, where iconic heritage and exquisite precision are seamlessly brought to life. Even in these frozen seconds of time, there is a forward momentum that celebrates OMEGA's endless pursuit of excellence. This star-inspired watch, with its white mother-of-pearl dial and diamond-hour markers, is the perfect choice for a magical winter full of beauty and imagination.
Ω
OMEGA

Style

Whitney's wardrobe

Interview | Charlese Antoinette on creating and sourcing looks for the singer's biopic. By *Hannah Marriott*

In the new Whitney Houston biopic, *I Wanna Dance With Somebody*, music steals the show, but clothes come a close second. From the white tracksuit worn to sing the national anthem at the 1991 Super Bowl (a performance spine-tinglingly recreated by British actor Naomi Ackie) to the bustiers and chokers of Houston's Dolce & Gabbana period, the film is packed with memorable fashion moments.

However, it is the offstage outfits that do the most character work. "I think in her time off, she got to be herself," says the film's costume designer, Charlese Antoinette (her full name is Charlese Antoinette Jones but she usually drops Jones), when we meet for coffee at Manhattan's Soho Grand Hotel ahead of its US release on December 23. Antoinette is dressed head-to-toe in white and wears a gold necklace that says "I Wanna Dance With Somebody", made for her by a friend; it's fair to say that the project got under her skin.

After hundreds of hours watching documentaries and researching paparazzi photographs she realised the singer "was Whitney Houston on stage and Nippy [her nickname] offstage". In her downtime, Houston was very fashionable, frequently clad in "really awesome streetwear looks, particularly in the late '80s, early '90s: Air Jordans, jean shorts and lots of leather bomber jackets.

'It felt like I was hitting a ceiling . . . isn't it funny how when you're about to give up things just blow up?'

Things you wouldn't always associate her with."

The film tracks Houston's life, from her rise to fame during the 1980s to her death in a drug-related accidental drowning in 2012. Central to the film is her relationship with her female friend, Robyn Crawford, which is depicted as a love affair that became platonic affection and professional collaboration. Their romance was rumoured throughout Houston's life, and confirmed by Crawford's own 2019 memoir.

The question of whether Houston had to hide her true identity — and whether the pressure of maintaining her "America's sweetheart" persona contributed to her tragic downfall — has been much-debated. The film tackles these issues, albeit lightly (unlike previous biopics and documentaries it was signed off by Houston's family and produced by Clive Davis, the founder and president of her label Arista Records, played by Stanley Tucci), but issues of identity are visible in her wardrobe.

Clockwise from main: Naomi Ackie wears a tracksuit to play Whitney Houston at the Super Bowl in 1991; with Stanley Tucci as Clive Davis; wearing a gown; designer Charlese Antoinette — Emily Aragones; Elizabeth Allen

Houston never looks comfier than while wearing loungewear at home in the 1980s with Crawford. She wears a Levi's sweatshirt and jeans — an exact replica of the real outfit — when she signs her Arista Records contract in 1983, and annoys her parents, who think she should have dressed up. During the "How Will I Know" music video Houston has a giant silver bow on her head; Crawford tells her she looks ridiculous, but Houston asserts that the people want America's Sweetheart "and I'm going to give it to them".

That said, Antoinette's research suggested that Houston did have agency in her glamorous image. Having chatted to custom dressmaker Marc Bouwer, who created many of Houston's most famous gowns, she thinks: "She knew what she wanted. He told me she liked things to be very fitted, very body con."

She was a model before she was a singer and understood that clothing could create a persona. "I think for her, it was still that kind of mindset," says Antoinette. There are outfits that would fit nicely into any '90s revival moodboard, particularly a black matador jacket, with gold embroidery.

There were 110 looks for Houston alone, and more than 1,000 for the whole cast and crowd scenes. The job was a particular challenge because Antoinette only joined the film "a day or two before principal photography" when another designer left. It took three teams — about 20 to 30 people — to make hundreds of replica outfits, and to scour vintage dealers for period Versace and Dolce & Gabbana. The results will add to the buzz about Antoinette, who Vogue described as a "serious talent on the rise" for her work on 2021's *Judas and the Black Messiah*, about the Black Panthers in the late 1960s.

Antoinette, 39, grew up in Maryland, in a Pentecostal family. "Dressing up was a thing," she says; she learned about thrifting and fabrics from her "fashionable family, who knew how to make the most of their limited resources". She studied fashion merchandising and marketing at Philadelphia University, then moved to New York City to work in product development at Macy's, got an unpaid internship on a movie set and worked her way up.

But then, after "these cool early wins, I moved to LA and was struggling. I had to start over," she says. She went through a terrible break-up and could not pay her rent and was homeless for nine months, couch surfing.

She fought her way out of that situation, which she credits in part to some fantastic friends, and to Ifa, a spiritual system practised among Yoruba

communities in West Africa and the diaspora. But still, until *Judas*, her career often felt like "just pushing along", part of which was about being black in Hollywood. She saw the momentum of some white colleagues' careers; and noticed prejudice: "With me, a younger black woman, they're like 'I don't know if you can handle it'." She thought about quitting because "it just felt like I was hitting a ceiling".

Then *Judas* won her plaudits and visibility; she was invited to join the Academy of Motion Picture Arts and Sciences, and has worked on acclaimed horror film *Nanny*, the second series of HBO TV show *Random Acts of Flyness* and a forthcoming movie about the history of Nike, produced by Ben Affleck and Matt Damon.

"Isn't it funny how when you're about to give up things just like, blow up?" she says, and smiles. *Judas* "definitely catapulted me into the space I am now where I'm able to kind of be really selective about what I want to do".

Challenges remain, like the frustration of being pigeonholed. She is frequently put forward for movies with black casts or directors and is trying to work out "how to not constantly be pitted against my black colleagues", including strategically turning down a lot of other black biopics. "I don't have

'She knew what she wanted . . . she liked things to be very fitted, very body con'

to look like the cast," she says. "I mean, if the movie has aliens in it, I don't look like aliens. You know? It's like, Can I do some sci fi, please?"

In 2021, she created the Black Designer Database, a resource that connects filmmakers and stylists with black creatives, to place their work on projects. The database started life as a spreadsheet Antoinette used until an influx of people started asking her "who are the black designers I should be using?" in the wake of George Floyd's murder. The database's many hits include connecting Keresse Dorcely's small bespoke brand, SIX/20, with Universal Television's *The Bold Type*; Kat, played by Aisha Dee, wore the New York-based designer's varsity sweatshirt and yellow baseball jacket suit.

In August, feeling burnt out, she took a rare extended break from work, and travelled to Nigeria, and had "an amazing spiritual experience there". Now, she says, "I'm so clear, and so centred in this way that I don't think I've ever been". As she herself wrote in a 2021 tweet that went viral: "6yrs ago I was unemployed & homeless and couch surfing in LA. Now I'm the costume designer of an Oscar-nominated film and I live in a comfortable duplex with a view of Manhattan. I manifest. I rise from the ashes. I am a Phoenix."

Controversies, creative changes — and Kanye West

Annachiara Biondi on the big stories that made a splash in the fashion industry in 2022

After two years dominated by the pandemic, in 2022 the fashion and luxury industry faced new global challenges, including the war in Ukraine, the highest inflation rates in decades across the US, UK and Europe, and a slowing economy in China. But it was also a year of momentous changes within the industry, with a new wave of brand creative directors and CEOs; controversies, via Kanye West and Balenciaga; and big announcements, such as Tom Ford's acquisition.

Goodbye to André Leon Talley

On January 18, celebrated fashion editor and journalist André Leon Talley passed away, aged 73. Talley, an unmistakable figure often dressed in a sweeping cape and Manolo Blahnik boots, worked for titles including Interview magazine, Women's Wear Daily and US Vogue, where he became the first and only black creative director from 1988 to 1995. Born in 1948 in Washington DC and raised by his grandmother in Durham, North Carolina, Talley has been credited with paving the way for other black creatives in the industry. Fashion also lost designers Thierry Mugler, Nino Cerruti, Issey Miyake, Hanae Mori and Peter Hidalgo.

Brands pulled out of Russia

Eight days after Russia's invasion of Ukraine on February 24, Hermès announced its decision to temporarily close stores in Russia and pause all commercial activities in the country, initiating a series of similar moves from brands including Chanel, Burberry and Prada, as well as conglomerates Richemont, LVMH and Kering. Luxury brands were followed by publishing houses, such as Elle publisher Hearst, which ceased relationships with its Russian media partners in early March, and Vogue publisher Condé Nast, which terminated its franchise agreement with Condé Nast Russia in April.

Destination shows returned with a bang

In the early days of the pandemic, travel restrictions put a halt to luxury brands' outlandish destination shows, with some in the industry predicting an overhaul of the fashion calendar in favour of a more sustainable approach. Yet in 2022, destination shows were back in full force. Some of the biggest shows were Dolce & Gabbana's four-day Alta Moda extravaganza in Sicily and Chanel's three-day Métiers d'Art event in Dakar, Senegal.

Patagonia gave it all away

In September, Patagonia's founder Yvon Chouinard and his family transferred full ownership of the company, estimated at $3bn, to the Patagonia Purpose Trust and non-profit organisation Holdfast Collective. The trust, owning all the voting stock of the company, will ensure Patagonia honours its social and environmental commitments in the long term, while the non-profit, owning all the non-voting stock, will receive a dividend each year of roughly $100mn to be used to fight the climate crisis. Since founding Patagonia in 1973, US entrepreneur Chouinard has made environmentalism a key focus of his business.

The Kanye West saga

In January, Kanye West and Balenciaga's creative director Demna Gvasalia announced their Yeezy Gap Engineered by Balenciaga collaboration. By the end of the year, the parties involved were no longer working together. The trouble started in the summer, with West taking to social media to complain about management and creative conflicts with Gap. A few weeks later, he terminated his 10-year deal with the American retailer, citing "Gap's substantial non-compliance".

Then, in October, a surprise show at Paris Fashion Week for the launch of Yeezy Season 9 turned controversial when West appeared wearing a "White Lives Matter" T-shirt and delivered a long-winded monologue that included a declaration of rivalry against LVMH CEO Bernard Arnault. Following the show, and a series of offensive and anti-Semitic remarks by the artist, Balenciaga terminated the partnership. West, who has continued to use anti-Semitic rhetoric, was also dropped by Adidas, Foot Locker and talent agent CAA.

Tom Ford cashed out

On November 15, Estée Lauder announced it was buying Tom Ford in a transaction valuing the brand at $2.8bn, the biggest deal to date for the beauty conglomerate. Estée Lauder will operate Tom Ford Beauty, which has been under licence with the beauty conglomerate since 2006, while it signed a 20-year licensing agreement with Italian luxury group Zegna for the brand's women's, men's, accessories and underwear, and extended the Tom Ford eyewear licence with Italian eyewear company Marcolin. The acquisition fuelled speculation around Tom Ford's possible exit from fashion. The American designer is expected to stay on at the brand until the end of 2023, but it's unclear what will happen after that. "He's not interested in fashion any more," a source familiar with the negotiations told FT fashion editor Lauren Indvik.

Balenciaga's big mistake

In mid-November, Balenciaga authored another of the year's controversial moments when it released two ad campaigns (now withdrawn) which appeared to glamorise child abuse. The first, called "Gift Shop", featured children holding bags that looked like teddy bears wearing bondage gear, while the second, "Garde-Robe", included Supreme Court documents related to child pornography laws in the background. As outrage mounted, the company took to social media to apologise, but it also initiated a $25mn (£21mn) lawsuit against the production company behind one of the campaigns, a decision seen as a way to divert blame. With no end in sight to the backlash, two weeks after the unveiling of the "Gift Shop" campaign, Balenciaga's creative director Demna shared a personal apology on Instagram, which was followed by a note from president and CEO Cédric Charbit announcing that the brand wasn't pursuing litigation.

Clockwise from main: Chanel's show in Miami in November; André Leon Talley passed away in January; Tom Ford's label was acquired by Estée Lauder in November BOBY; Getty Images; WireImage

All change at the top brands

Bottega Veneta, Bally, Missoni, Salvatore Ferragamo, Etro and Off-White c/o Virgil Abloh all came under new creative direction this year, with Bottega Veneta's Matthieu Blazy making the biggest splash with his debut in February. Blazy, who succeeded Daniel Lee at the helm of the Kering-owned brand in November 2021, won accolades for his take on the house's craftsmanship and grounded elegance. Lee, meanwhile, was appointed chief creative officer at British brand Burberry in October, following Riccardo Tisci's departure, and is expected to bring fresh life to the label, which has been under new CEO Jonathan Akeroyd since April. Big changes are afoot at Gucci too, where creative director Alessandro Michele stepped down in November.

Prada and LVMH named new CEOs

In December, Prada picked former Luxottica executive Andrea Guerra to succeed co-chief executives (and husband and wife) Patrizio Bertelli and Miuccia Prada and prepare the way for their son Lorenzo Bertelli, currently head of corporate social responsibility, to take over in the next few years.

At LVMH, Antoine Arnault, son of chair Bernard Arnault and head of communications and image at LVMH, was appointed CEO of holding company Christian Dior SE in place of Sidney Toledano. The appointment raises Antoine's position in the French luxury multinational power structure — Christian Dior SE holds 41 per cent of LVMH, or 56 per cent of its voting rights — but succession plans at the world's largest luxury conglomerate remain a secret. Bernard Arnault, 73, has never publicly named a successor.

Hot pools and cold snow

Austria | In the village of Leogang, the Forsthofgut has evolved from a farm and two-room guesthouse into one of the Alps' most lavish ski-and-spa retreats. By *Tom Robbins*

What is the apogee of the hotel world? The centuries-old Hotel Magnificos along the Italian coast? The expensive minimalism of the five-star tropical resort, or perhaps the storied grandes dames of Europe's capitals? Maybe, though, there is a place at the top for the rustic luxury of Austria's family-owned ski-and-spa hotels.

They have evolved over the generations, using their success not to launch chains or reward shareholders, but to reinvest in continual expansion and innovation, until every minute detail has been considered and improved. At the Stanglwirt, for example, a 500-year-old Tyrolean hotel that has been run by 10 generations of the same family, even the lifts have been given rustic wood panelling, plus little carved corner cupboards containing a bottle of schnapps and glasses for passengers to refresh themselves. These places are twee beyond belief, yet magnificent in their devotion to *Gemütlichkeit*.

The Forsthofgut, which I visited this month, is a classic of the genre. In the hamlet of Hütten, outside Leogang in the Salzburgerland, it started out in 1617 as a farm and forestry business, providing accommodation for lumberjacks. The current owners, the Schmuck family, bought it in 1905 — we are now on the fifth generation — and, in 1960, opened two rooms of the farmhouse to tourists. In 1980, they added a few more, then in 1990 opened a new building beside the original house, creating a proper hotel. By 1992, brochures boasted of the chance to swim in a pond outside, and in 1997 the farm's last cow was sold as hospitality became the sole focus.

Today, the hotel has 105 bedrooms — a modest enough total that new arrivals are welcomed by their name on a blackboard by the entrance — but it sprawls across the foot of the Asitz mountain, in a succession of buildings, traditional and modern, set around a lake, multiple pools and hot tubs, a ski piste snaking through the middle.

Some €60mn has been spent since Christoph Schmuck, now 38, took over from his father in 2006, including a €10mn spa expansion unveiled last year, to create a sort of Alpine fantasy land. Beyond the restaurants and spa is a miniature farm for children featuring Lilliputian chalets; beyond that are stables and a riding school, added this year, and off to one side a wildlife enclosure for red and fallow deer (which visitors can feed once a week). Room keys come with a fold-out map, but new guests are still likely to get lost.

I took an early flight from London City to Salzburg, only an hour's drive away, and went straight out skiing. By the time I got back, it was *Strudelzeit* (cake time). All bookings come with what the hotel calls "three-quarter" board: breakfast, dinner and afternoon cakes. After a slab of apple strudel, I hit the spa. Snow was falling, steam rising from the outdoor infinity pool as I swam into the darkness.

Later, I lolled in another pool, at 42C, then watched bathers climb out and lower themselves through the hole cut in the icy surface of the adjacent lake. In all, the spa covers 5,700 square metres, with some family areas (including a long water slide) and others reserved for adults, plus relaxation rooms where people doze or read on daybeds, looking out at snow-covered trees and peaks.

The facilities might be cutting-edge but the tone is low-key, largely because it is so family-focused: as well as the water slides, there are rooms with art and craft activities (and 12 hours of childcare per day is included in the room rate). Couples in spa robes cradle tiny babies; older children team up to roam the hotel.

The Schmuck family, too, are a constant presence, their photos prominently displayed (even disconcertingly popping up on a screen set into the breakfast buffet). "I grew up running around the hotel," says Christoph Schmuck. "I used to get into trouble with my mother for eating the sugar from the tables in the restaurant." Today he employs 250 staff.

If the hotel has evolved from humble beginnings, so too has the ski area. For almost 30 years, Leogang was the poor relation to the village of Saalbach, on the other side of the Asitz, which opened its first ski lift in 1945 (not to mention the famous Kitzbühel, 28km to the west, which installed a gondola lift in 1929).

Leogang didn't get a lift until the winter of 1971-72 and, even then, it had an inauspicious start. Poor snow meant the lift, which only went halfway up the mountain, operated for just 14 days all season, so the bank refused to lend funds for an extension. In the end, the lift company founders went from house to house asking for support; 11 people agreed and by 1974 the lift had finally been extended to the top, creating a connection with Saalbach.

More expansion and connections followed, the village names being appended to the ski area brand name until, by 2015, it had grown into the less than snappy Skicircus Saalbach Hinterglemm Leogang Fieberbrunn. In fact, it's also possible to ski into the Zell am See area, meaning there are 347km of slopes on offer (trumping even Kitzbühel, which has 233km).

Rather than being run by a distant publicly listed group, as is common in France and the US, the Skicircus lifts remain in the hands of five local companies. That means profits are reinvested and the lifts are as fast and modern as anywhere, many of them big chair lifts with covers and heated seats. Perhaps conscious of its mouthful of a name, the ski area also brands itself the "Home of Lässig" — a word with no direct translation but which means cool, fun and laid-back. Though dreamt up by the marketing department, it describes the area rather well: the skiing is mostly below the treeline, rather than up among glaciers and rocky summits; more than half the runs are easy blues; and you are never far from one of the 60 cosy mountain huts.

The Schmucks are not the only local family to have ridden the transformation. Sepp Altenberger became a ski instructor after the second world war, later opening a guesthouse for clients which has grown into the Krallerhof, Leogang's other five-star hotel, still run by the family and with a vast new spa.

Just up the hill, farmland owned by Huwi Oberlader's family since 1782 is now Priesteregg, a hamlet of 18 chalets that look ancient but are in fact newly built, luxuriously appointed and come with a nearby spa and restaurant, Huwi's Alm. At the top of the Asitz, the food stall where the Oberlader family used to serve grilled chicken has evolved into the Hendl Fischerei, a smart restaurant and après-ski bar, serving oysters and champagne (and grilled chicken still), with a DJ in the afternoon. "At the moment, there's a really good generation in the hotels, the cable car company and the ski school, who want to move forward fast," says Christoph Schmuck.

Clockwise, from above: the Forsthofgut; the Schmuck family, with Christoph, the hotel manager, second from right; one of the hotel's saunas, with a view of the ski piste; the 25m-lap pool

Collaboration is common, even among rivals, he says — several of the hotels, for example, have come together to build staff accommodation. "The money we make, we reinvest — we believe in a good future for our village."

Back at the Forsthofgut, after a day exploring the mountain, I ate a six-course dinner (included in the room rate), much of it sourced from the nearby farm the hotel acquired in 2017. There are also Japanese, fine-dining and traditional Austrian restaurants.

If anything, though, it is the breakfast buffet that is most emblematic of the whimsical maximalism of this type of Austrian hotel. A large room is filled with endless choice: three types of fresh melon, a dozen cheeses accompanied by six homemade marmalades (cherry and sweetbriar, pear and passionfruit, apricot and marzipan, and so on), four types of butter, five types of honey, plus a fresh honeycomb. A side room is packed with pastries and breads, including the Forsthofgut "house bread" made with apples, carrots and pumpkin seeds.

Plates laden, guests can sit and read the Forsthofgut Morning Post, which lists scores of activities for adults and children, from yoga to group walks and HIIT workouts, all included. For some, the tyranny of such choice might begin to drag, but it does make you think that perhaps other hotels aren't really trying.

Three more family-owned Austrian retreats

Stanglwirt, Going am Wilden Kaiser
Situated at the foot of the dramatic Wilder Kaiser massif, and a few minutes' drive from the pistes of the SkiWelt area, the Stanglwirt was first licensed as an inn in 1609. Its fame grew after visits by Bing Crosby and Clark Gable in the 1950s, and because of the novelty of a window in its restaurant that looked straight into a cowshed. It still operates as a dairy farm and a stud for Lipizzaner horses but also as a lavish hotel with vast spa facilities and tennis and golf schools, a children's' "water world" and its own fishing grounds. "My credo is not 'either/or' but 'both/and'," says owner Balthasar Hauser. Doubles from about €450, including breakfast; *stanglwirt.com*

Das Edelweiss, Grossarl
Opened in 1979, the Hettegger family's guesthouse has evolved into a 145-room resort right beside the pistes of the Grossarl-Dorfgastein ski area. Three generations on, 14 members of the family now work at the hotel, which underwent a major renovation in 2018-19 and now offers a 7,000 sq m spa that a extends over five floors, plus a penthouse suite with a private pool on the terrace. Doubles from €360 half-board; *edelweiss-grossarl.com*

Trattlerhof, Bad Kleinkirchheim
In the home resort of ski legend Franz Klammer, the Trattlerhof was licensed in 1642 and has been in the hands of the Forstnig family since 1884. Today, it is a comfortable four-star with 60 rooms, a gourmet restaurant and its own cake (the Trattlers Hoftorte), which it has been serving for more than a century. There's a 1,000 sq m spa too, though enthusiasts will also want to visit the village's two mineral-rich thermal spas, the Römerbad and the St Kathrein. Doubles from about €180 half-board; *trattlerhof.at*

i / DETAILS

Tom Robbins was a guest of the Skicircus Saalbach Hinterglemm Leogang Fieberbrunn (*saalbach.com*), SalzburgerLand Tourism (*salzburgerland.com*) and British Airways CityFlyer (*ba.com*). BA flies twice-weekly from London City to Salzburg, from £120 return. Naturhotel Forsthofgut (*forsthofgut.at*) has doubles from €550 per night, three-quarter board

POSTCARD FROM… LICQUES, FRANCE

In Licques' main square, a giant cauldron of turkey broth was steaming over a blazing fire pit and being ladled out to serve the incoming crowd. "Come and have soup," called the lady handing out the paper cups. "It's really warming, it's free!" I took a sip, a welcome treat as the temperature dropped to -2C. The serving of *la potée* (the hotpot) marks the start of the Fête de la Dinde (festival of the turkey), held every December in Licques, a small town near Calais renowned for its poultry, with 80 producers among a population of just over 1,600.

I had come for a quick pre-Christmas jaunt to stock up on some gourmet treats from Boulogne and Saint-Omer and to soak up the festive atmosphere in Licques. This year's festival was the first after two years of Covid-related cancellations, and locals chattered excitedly as they sipped the hot broth and listened to local TV personality Bernard Seitz do the introductions via a booming loudspeaker.

Seitz told the growing crowd how the festival had begun in the 1960s, when local producers would bring their live poultry to the main street two weeks before Christmas to show them off and take orders. In normal years, the festival sees a parade of turkeys being herded up the steep main street by local children and members of the town's guild, or "brotherhood", of those working in the industry, but efforts to prevent the spread of bird flu put paid to the tradition this time.

No matter. Instead of the gobbling gaggle, the parade was led by a 4ft stone statue of a turkey named Alfred on the back of a tractor-drawn trailer. Behind Alfred were the brotherhood — la Confrèrie de l'Ordre de la Dinde de Licques — with men in cavalier-like costumes and women in blue and white robes.

They were joined by more than a dozen other brotherhoods, representing specialities from the Hauts-de-France region and beyond. The grand master of the turkey brotherhood, Guy Savary, with his impressive moustache and feathered hat, took over the mic and introduced each group as they lined up.

Matthew Cook

Among them was an ebullient group from the Confrèrie des Fous de la Patate Azteque à Esquelbecq — literally, the Brotherhood of the Aztec Potato Madmen from [the village of] Esquelbecq — dressed in potato sackcloth robes with colourfully decorated hats. There was an extra-warm cheer for the brotherhood of brewers and distillers, who had come all the way from Belgium, while the three members of the Grand Ordre International des Dindons du Périgord sported pilgrim-style hats as a nod to the turkey's North American origins.

Next, a local bagpipe player warmed up the crowd for the guest of honour: Michel Pruvot, France's most famous accordionist. With Pruvot squeezing out the tunes next to him, Savary launched into a loud rendition of the "Hymn to Licques", with lyrics that celebrate the town's poultry-rearing and a catchy chorus that everyone joined in with. Then, with the crowd that had swelled to about 250, we set off up the hill to the festival tents, singing the hymn on repeat.

While everyone gathered in the tent, I paid a quick visit to what remains of the 12th-century abbey over the road. There I learnt how, in the 17th century, the monks introduced turkeys to the area and taught villagers how to rear them. The free-range poultry, fed on a diet of cereals, has protected origin status and the Label Rouge, France's sign of quality assurance.

Chickens and turkeys were being sold at stalls in the tents, alongside cheese, snails, wine and smoked salmon. I bought a few things, then took my seat for the feast.

Rows of refectory tables were set out to welcome some 300 visitors, many of them retirees (apparently the teenagers were still recovering from a disco the night before), and we sat down, nodding our "*bonjours*" over the music from Marie-Pierre et Momo, a singer and keyboard player. We tucked into white pudding sausage with apple sauce, then a huge plate of roast turkey and chips.

By the time I came to leave, Pruvot was on stage with his accordion. The dance floor was full and everyone was waving their hands in the air to the music. Even the two turkeys in an enclosure in the corner of the marquee seemed to be happy. As I crouched down to bid one of them farewell, he pecked out and gobbled loudly.

Carolyn Boyd

i / DETAILS

Carolyn Boyd was a guest of Pas-de-Calais Tourisme (*pas-de-calais-tourisme.com*) and stayed at L'Apartement Merveilleux, on Rue Henri Dupuis in Saint Omer, from €145 per night for two people (*tourisme-saintomer.com*). Eurotunnel (*eurotunnel.com*) carries cars from Folkestone to Calais, a 25km drive from Licques, from £82 each way

Books
Life&Arts

A seasonal short story written exclusively for the FT by *Brandon Taylor*, whose debut novel 'Real Life' was shortlisted for the 2020 Booker Prize. With illustrations by *Kelly Bailey*

Philosopher kings

Late October — rain in New York.

As was his habit, Noam arrived at the studio just after six in the morning. The antechamber was cold. He had not come in for a while because of a bad cough that had left him with a deep ache in his back and a bruise running down his right side. Today, the pain was obeying itself, and he could walk with an approximation of his formerly smooth gait. His orthopaedist had suggested a cane, but Noam, who had run track all throughout his school years, considered this a form of death. The world was a little dimmer now that he was better, as if recovering had permanently cost him some crucial inner reserve necessary for perceiving the full vividness of things.

They were settling the show for spring 2020.

The tall, broad window was dark with rain. The fabricators were standing and sitting on the raised steps and along the elevated platform of the window ledge. They were drinking their coffee and convening among themselves, but when he entered the stiff, chilly air of the atelier, they all looked at him with shining black eyes, and he felt for a moment that he had come into some foreboding scene of Russian Realism. The eerily tense idleness of Makovsky or Yaroshenko. Their whispering grew fractionally louder and then died away entirely, but they went on watching him. He stepped more fully into the room, and could then see, running through the dark of the room, a thin gold thread of light from the west workroom. It flickered in the air like some delicate, transient bit of magic.

His stepping forward triggered something in the women, and Una, the head fabricator, came forward. She was tall, exceptionally pale, and had something that might have once passed for sexual charisma but which now emanated as a resinous heat.

"You're here, sir? Today?"

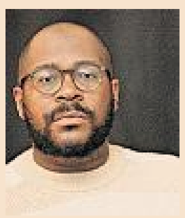
"Yes," Noam answered.

"Does Mr Vadim know, sir? That you're in today? We haven't had word that you were joining us."

Vadim had run the atelier for the last five years, since Noam had begged off, tired, but more than tired, empty of ideas. There was no one he trusted more than Vadim to steady the ship while Noam went in search of something, anything, to get it back. That old easiness in the hand.

In the late 90s, Vadim had been his assistant, plucked from a summer internship at Parson's for his quick eye and sharp instinct. He had a beautiful way with freehand drawing and had come with a brilliant mind for menswear and tailoring. And later, oh, he dazzled Noam with those first, beautiful coats for autumn 2007. How surprising they'd been, an oasis of structure and form amid the tumult and disarray, the lukewarm rehash of mischief from greater eras. Vadim. So young, he'd been then, with his thick lashes and boyish pout, tall but not lean, soft. Tender. Noam could still see the way the nape of his neck had flushed under the glow of those early compliments. Yet, now, he was being asked if Vadim knew that he was stepping into his own studio.

Brandon Taylor



Brandon Taylor's debut novel *Real Life* — which centres on a gay black biosciences student at a university in America's Midwest — was shortlisted for the 2020 Booker Prize, the 2020 National Book Critics Circle John Leonard Prize and the 2021 Young Lions Fiction Award. Taylor is also the author of *Filthy Animals*, a collection of short stories that won the 2022 Story Prize and was a finalist for the Dylan Thomas Prize. He was born in Alabama in 1989 and resides in New York City.

"Does Mr Vadim need to know my every move?"

"No, sir, of course not. It is your atelier. We just didn't know. We might have prepared better, sir."

Noam clenched his jaw at this. He felt challenged by Una. The other women's dark eyes flashed on him as she spoke. Some of their faces turned as they whispered, momentarily caught under the faint gold shade of the workroom lights.

"It is my atelier, as you say," he said. "I don't have to explain myself."

"No, sir. Of course not. Certainly not to us."

"Certainly not," he said.

The women stood there, shifting in massing shadow. He could not tell what of them was in the room with him and what of them belonged to that shadowy region beyond the dark glass.

Una's face hardened and whitened.

"Mr Vadim's just. He's very particular, sir. I don't want any trouble."

"Well, Una, do as you are told and there won't be any. I have no plans to interfere with your work."

"Yes sir. As you say, sir. And how is your health?"

"I'm well," he said. "Thank you, Una."

"Of course, sir. Glad to hear it."

The women with their dark faces and glinting eyes lingered near the raised steps. Looking down on the two of them. He felt watched. Observed. He did not like feeling as though his moves were being logged and reported.

"That's all," he said.

"Very good, sir."

Una turned and ascended the steps to join the women. Noam could see then that they had stepped out of their slippers and had set their cups and glasses on the ledges of the steps. They stood there in their stockings with the prim white worker coats hanging stiff on their shoulders. These women, young and middle-aged, from France, from Italy, from Nebraska, from Connecticut. They belonged to that loose tribe descended from the local seamstress who had been taught European techniques and French terms. Looking out at him from the sharp cliffs of their eye sockets and from beneath the perch of their brows, gazing at him from some dark and remote corner of bourgeois intelligence.

> He made clothes for the quiet hours and for the bright moments of transit that illuminated those quiet hours

He did not know what to say to them. There was a time when he might have known what to say. But now these women belonged to Vadim.

When Una had joined the other women, there was a clinking of glasses, saucers, the rustle of their clothes as they put back on their slippers and descended the steps. The women shuffled by him, their white coats and slippers murmuring as they whispered Good morning, sir. But though they acknowledged him with their words and though they passed by him, he had the terrible feeling that he could still see their reflections in the dark glass of the window, staring out at him. As they passed him, the whispering grew louder until it buzzed in his ears, and the number of women seemed to multiply. He felt hot in their shuffling, and he wanted to cry out, to say that there'd been some mistake, but then, the women were gone and he was alone in the wide, empty room.

Noam's studio was on West 42nd Street in one of those offensively contemporary buildings that expressed a real American anxiety towards history, chosen simply because the developer had given him a discount for opting in early — though Noam concealed this fact and instead circulated a rumour that he occupied two floors of the building solely because it had become trendy to do so. The building had the hideous interior angles of modern American architecture — everything sharp, on a line, curiously angled. Yet Noam felt that the studio retained a shocking degree of human warmth with high, broad windows that soaked the wooden floors in rich light. The workrooms had long wooden tables that he had sourced from an old monastery in Normandy. He combated the contemporary with the historical: 17th-century chairs, 18th-century paintings and sculpture, rugs from the 16th century that had been carefully restored. Everything sourced from some other time, each carrying a long if mundane history. In fact, he preferred objects that had been owned by unremarkable people, things found in backwaters, left to moulder in the ruins of family homes long abandoned.

The women had shut both doors to either workroom, but beyond he could make out the hum of their activity. The morning banter as they lifted away the tissue from the previous day's work and inspected the seams they had left for their future selves. The sound of the machines warming up and throwing those first, uneasy stitches in bits of old scrap just to get a sense of what the day's rhythm would be. Noam pressed his ear to the door of the west workroom and listened to the pedals going down, rising up, the way the women knew how to catch and hold, steady the heavy, driving needles. He could not hear what they were saying. They spoke in a register of whispers and clicks, snaps of the fingers and jotted notes. He crossed to the east workroom and listened to the muslin and the tissue and the pleats and the hiss of the thread being drawn up and through. Morning work.

He tried to forget the unsettling image of the women in the window gazing out at him. That moment when the women had seemed to double and triple around him, when it seemed that something terrible might happen to him. He climbed to the second floor of the atelier, where he found the offices empty and mute. Vadim was not in. He had the unseemly modern habit of arriving late in the afternoon, when all the garments had been made and prepped for his appraisal. By then, it was too late to fix anything. By then, the shape had matured and emerged from the imagination into something three-dimensional and solid. By then, bad ideas had the easy, unearned confidence of exist-

ence, and were therefore harder to refute. But if you could catch a bad idea, a lazy image, an ugly curve, before it emerged, then you could do something about it.

He had told Vadim this many times — be like Cronos, Ivan the Terrible, all those great eaters of disappointing children. But Vadim would laugh and say that there was nothing to worry about.

Noam was not so sure. He did not have the advantage of Vadim's easy way with people or the world. For the last several weeks, Noam had been meaning to speak to Vadim about coming in earlier, but Vadim kept waving him off.

"Don't worry, it will be fine — everything needing done is done. Please, relax."

Just last week, Vadim had gently suggested that Noam didn't need to come into the atelier so soon after getting better. That it made the fabricators anxious

and it gave confused signals. After all, had Noam not given Vadim his complete trust?

Of course he had, yes, of course he had, but this was too much, being asked to stay away from the atelier he himself had built with his bare hands. Surely this was too much, this idea that Noam had nothing to offer except anxiety and lingering judgment? Vadim had smiled and said that it was alright, no one was telling him not to come, that he was simply sharing some thoughts passed to him from some of the fabricators.

How Noam hated that smile. Wolfish, calculating, holding back as much as it offered. A smile with no warmth and no kindness, a gesture of total fake humility and vulnerability, a stroke from some new, gestural vocabulary of the young that was both without precedent and also totally just the same old bullshit. Falseness.

He would have another word with Vadim when he arrived in the late afternoon to survey the work of the morning. He would take him by the elbow and stress again that there had been a way of doing things and this way was not what he preferred. It led to substandard work or worse, theoretical concepts. He hated abstraction in designs. Soft ideas. Gummy theories turned into vague notions that existed more in write-ups of shows than on the actual catwalk and even less in the practical wearing of the garments.

Above all, Noam's atelier was practical. The garments were beautiful, well-made, designed to be worn, to carry a person through a season of life with all its many currents and strange events. He made clothes for the quiet hours and for the bright moments of transit that illuminated those quiet hours. A special dinner. An evening at home. A benefit. A party at a friend's apartment. A ceremony. The opera. The ballet. Noam had always considered fit and form the highest aesthetic principles worth chasing. The line was everything. Elegance. His clothes were not demonstrative in their argument for the kind of life he wanted to dress people for. Rather, they were inward, contained.

Modernity had once meant a kind of sophisticated, principled engagement with one's time. And now it meant a vulgar, lashing argument that had to end in tatters on the floor.

Mess and spectacle.

The upper floor of the studio was quiet except for the rain against the window. Empty except for Noam. The offices sat mute and dark. Yes, he would have a word with Vadim.

Around noon, Anouk called to say that her son had a high fever, and so she could not come into the studio for lunch after all.

"I would get a sitter," she said, "but he's made me promise to stay with him, and I feel that I should."

"Of course," Noam said. "Of course, darling, be with your boy, another time."

"I was so looking forward to seeing you. I haven't been to the studio in ages."

"Yes, but it's not going anywhere. Come next week, how about that?"

"Of course, yes, that sounds wonderful."

There was a moment of silence on the phone after that when Noam could hear Anouk breathing down the line. He might have said something comforting to her, but of course he was disappointed that she would not be coming into the studio, and so had nothing to offer her to make her feel better.

"And how are you?" she asked. "Are you better? You must be if you're in the studio."

"I am well, darling. You know, very well. Please, go be with your boy."

"Of course, alright."

After the call, Noam gazed down at the grey streets and tried not to feel stung. There had been a time, many years ago, when Anouk and any of the other under-assistants would have done anything at all that he asked of them. A time when they would have cut off their own right hands to see his sketches in progress or to be consulted on a matter of line or seam or pattern. There had been a time when they might have given flesh and bone to see him lay pleats upon the paper dolls he made in the later stages of a design, watching with wide, bright eyes as though he were making toys for them. But that was over now. They did not have time for him. They had their own work and their own lives in which they were securely fastened and no longer had any use for symbols of paternal authority or for philosopher kings.

Now that his cadre of assistants, acolytes and former aides had set him aside, Noam parsed his sketches alone. For the first time in a long while, he had felt moved to work on something, at first just putting down some dark curves that suggested a form or the outline of a figure. And then draping drafting paper across these deep, black lines so that he could sketch in soft brushwork the light implications of a garment. Laying one set of strokes upon another, removing it

to check, replacing, sketching again. Reaching for the pastel brush markers he favoured, the soft hiss of the fibres against the tissue. Working quietly and in his own way as the light deepened and darkened, grew more certain and then faded, sketching in his office, while below him the hum of the atelier under the marching orders of Vadim or the other lieutenants.

But now, looking over the sketches, he felt their incompleteness of vision. Their lack of weight or substance. This was the vague, gestural work that had come to signify his approach in recent years. He recognised in it the soft, diluted sight that had so characterised the work of his drawing masters in Florence and Naples when he had been learning his craft. He could remember looking at their sketches, all implication and innuendo, thinking that they lacked the strength, the vividness of the direct encounter with form. He had vowed to never make such drawings. Yet here they were laid out under him, secured at the corner by tiny silver binder clips and made into lightweight folios.

It was still early, yet the day felt done. A yellow cab pulled up to the kerb below, and someone got out under a pale green umbrella. They went into his building. The cab pulled away, joined the idling dead waiting for the light to change and release them. Noam thought, somewhat ridiculously, that he could hear a distant banging of some door being thrown open. He lost sight of the cab. They all looked rather the same.

There was a knock at his door, and he turned to see Vadim standing there with a small plate in one hand and a demitasse in another.

"I thought you might be due for a refill." Vadim set the plate and cup on the small table near the desk, knowing that Noam did not like food near his drawings. Then, he sat on the leather settee from Genoa that he had given Noam as a gift during the first year of running the atelier as a thank you for his vote of confidence. He had shut the door behind him, Noam noticed.

"So you've arrived."

"Oh yes, I've been here a little while. I hear you gave the fabricators a scare this morning. They thought you were a ghost."

Noam lifted the tea towel from the plate and saw that Vadim had brought him some figs and soft cheeses, a quarter of a warm baguette. A silver-handled cheese knife. The coffee was perfectly hot. He waved off Vadim's comments.

"Have you given them some reason to think I'm a ghost? Spreading rumours of my demise?"

"Don't even joke," Vadim said. "I want you to live another sixty years at least."

Noam laughed. The figs were exquisite.

"But didn't we talk about this a couple weeks ago. You would take some more time before you came in. You aren't well, Noam."

"Well enough," Noam said. "I am not a child. I do not need looking after."

"No, but." Vadim sighed. "Anouk called me."

Ah. Here was her feverish child. Anouk and Vadim had always been close. They'd been in the same year at Parson's. Lonely, angry, snarling and young, tired of their parents and their parents' Old-World anxieties. They'd been so beautiful, the two of them. Last winter, before Noam got ill, Anouk had a beautiful show of watercolours in one of the Chelsea galleries. She painted with such delicate precision and with such dry pigment that it went on almost like graphite. Soft, powdery, strobed with light and filled with air. She'd made these enormous portraits of her son — Nigerian French, his mother's large eyes and his father's terrifically elastic expressiveness — and of her mother and her grandmother. The grandmother had died in the camps. The mother had died from ovarian cancer when Anouk was seven. Her father had remarried to a very wealthy woman from Marseille, and they'd lived in a wonderful apartment in Paris and in Milan. The portraits were of Anouk's son and Anouk's mother and grandmother. She'd painted things that she never saw, impossible things, impossible combinations of the people she loved. The show had been wonderful. The shapes still vibrated in his mind. He wished that he could erase them now that he felt betrayed by her.

"And what did Anouk say?"

"That you're drawing again."

"Old men have their hobbies," Noam said.

"And she told me that she fucked up and told you about the spring show."

"The trouble with loyalty is that you can't be loyal to everyone."

"Noam, spring 2020 is almost finalised."

"It's my show."

"Of course. But we've done some real work here. And it's almost done."

"So you don't need me. Just my name on the door."

"We need you. This is not . . . this is not a war, Noam. It's art. You're one of the great artists of our time. It is an honour just to hold your pencil. Of course. But. Logistically. I mean. You haven't. Wanted to be a part of the process in a long time. Just last year, you wanted nothing to do with the designs, not even when they were in fabrication."

"Because you didn't need me, did you?"

"That's not fair, Noam. I called you every day. I showed up to your door and I brought sketches, I asked your opinion. You didn't want to be consulted."

"Who wants to be consulted for their own execution?'

Vadim laughed loudly. "Those shows got raves. We can't keep the Rebecca dress in stock. The Florence coat is out the door five times an hour. We have more clients for fittings than we know what to do with. Everyone wants us now."

"As I said. My execution. Congratulations on your ascendancy."

Vadim leaned forward and put his chin in his hands and gazed at Noam

The line should flow from the shoulder to the hand to the pencil and to the paper, so that the line was a thing moved from him into the outside world on one continuous bead

Continued on page 10

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VITSŒ

Short story

Continued from page 9

boyishly. “May I see the new designs? It’s been a long time.”

“Don’t patronise me.”

Noam eased into a chair near the window.

“I’m not. I’d like to see what you’ve been doing.”

“So you can pretend to humour me? Consider my work for my own show?”

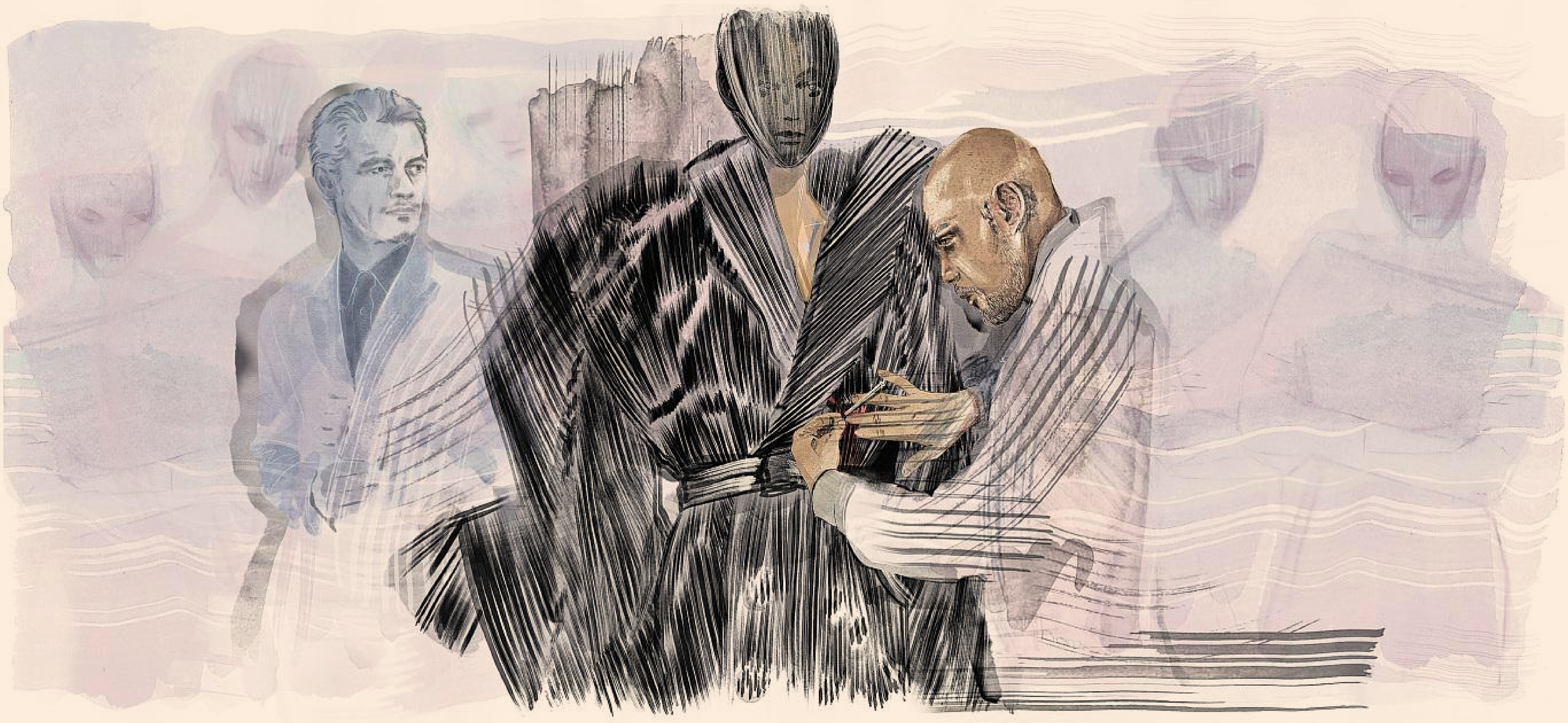
“Noam. I’m not your enemy. It’s your atelier. If you want to do the show, it’s yours. Of course it is.”

“And if I said yes, I do?”

Vadim shrugged. Noam could not read his expression.

“Look, if it pleases you.”

Vadim stood tentatively. He crossed the room to the table and he slowly withdrew the sheaf of papers from the leather folio. He lay them down as though they were precious and turned



the tissue paper, inspecting the layers of lines and light. Noam felt his stomach grow hot. Vadim pursed his lips, then made a low humming sound. He turned pensively through the garments. Extracted the next sheaf from the folio and inspected that too. The room felt warm, close.

Noam could remember being in drawing class. The way the instructor’s hand would come to rest on his shoulder, following down to his elbow, his wrist, correcting tension, correcting posture and line, directing him to adjust himself so that the line would flow from the shoulder to the hand to the tip of the finger to the pencil and to the paper, so that the line was a thing moved from him into the outside world on one continuous bead. The line had to begin in you. The mark was just the end of a long, slow gesture that had begun somewhere deep, deep in the dark of your body.

But watching Vadim look over the drawings, he felt a perverse anger towards Anouk. It should have been her looking over them. Cooing approval or clicking her tongue at his mischief, encouraging him to go to Vadim. It should have been her, not Vadim, here looking at them now, before they were ready. And what had he expected? That after five years, he’d have something other than a revelation of his own inadequacy? He felt dumb. Stupid. The inchoate scribbles of an old man.

“These are stunning, Noam,” Vadim said. He looked at Noam with another of those inscrutable expressions of his. “They are so. Pure.”

“You mean simple? Naïve? Boring?”

“No,” Vadim said. “I mean pure. They are. Effortless. Clear. Just. Beautiful.”

“Vespers,” he said. “They are vespers. Nothing solid to them.”

Vadim took the folio in hand and brought it over to Noam. With the tip of his finger, he outlined the shape of the dress amid the soft, fluttering lines that Noam had sketched in silver and grey.

“No, here,” he said, “it’s beautiful what you’ve done. It reminds me of what I first loved in your clothes.”

“Oh, is that so?”

“Yes, here, look,” Vadim pointed to a loose, black sketch, a woman in profile, long coat, wine-dark, a flare about the shoulder, denoting openness, weight at the bottom. “It’s just the opposite of what people are doing now, with all these cutaways. Here is like, inwardness.”

Vadim’s eyes were bright, shining. He looked again like he cared about Noam’s thoughts.

“I think it is very beautiful, these sketches. These clothes.”

Noam took the folio from Vadim and folded it closed and set it aside on the desk. Vadim looked at him

> ‘I am not your enemy,’ he said. ‘I love you.’ ‘Love is just betrayal in slow motion’

curiously as he did this.

“They were not ready to be shared,” Noam said. “But thank you for looking.”

“I’m just glad you’re drawing again. It’s wonderful.”

“Is it?” Noam asked. “It can’t be good news for you. Having an old man in the attic knocking around, scaring the fabricators.”

“Noam, if you want to take over again, then just say. What’s bad is confusing everyone. You show up, glare mysteriously. People wonder. They talk. They get confused.”

“I don’t want to do the spring show,” Noam said. “I have no intention of getting involved. It’s all yours.”

Vadim had enough tact not to sigh in relief, but Noam could see his eyes grow just a little brighter at this news. He nodded tightly. But then, he leaned over the desk and kissed Noam on the lips. The kiss was warm, affectionate, not without sexual heat.

Noam remembered the first time that they had kissed, New Years’ Eve, 1999, the end of an era, the end of the world. Vadim, nineteen, drunk on champagne for the first time, yelling at the top of his lungs on the rooftop of some art dealer in Tribeca. Noam holding his coat, watching Vadim’s broad shoulders expand with the effort. And then, how he’d turned, New York a beautiful blur behind him, leaning in, kissing, hungry, searching, looking for love and finding it in every wrong place, how deeply, how fully they’d kissed. And then, going home to Vadim’s small, cramped studio apartment and undressing in the dark, bumping into his cheap furniture, knocking over a mason jar, having sex on the futon, and then stepping on the broken glass in the grey morning light.

They were so far from that moment now. Kissing in his office. These many years after the fact, these two decades later. He felt the acuteness of the years between them more now than he had then, and he’d felt it plenty then, bleeding on Vadim’s mattress, trying to tweeze the glass out. There had been many more mornings and nights since then. Many, many more. But he thought of that first night now. Cold. Dark. High up on that rooftop, watching the millennium glide to an end and another begin. When Vadim had kissed him as though it was the thing he’d lived his whole life for.

“I’m not your enemy,” he said. “I love you.”

“Love is just betrayal in slow motion.”

Vadim laughed and kissed Noam again. Then he put his hand on the folio and looked at Noam quite seriously.

“These are very beautiful. It is good you are drawing again. It is good you are still with us. I was worried you wouldn’t get better.”

“It must — ”

Vadim took Noam by the shirt gently, but firmly and he held him close.

“Stop it,” he said. “Just stop it. You asked me to run this atelier. I said yes. You have to forgive me for saying yes, Noam.”

Noam felt dizzy at the suddenness of the gesture, and the jolt of heat running up his side. The pain was waking up again. He’d been doing so well.

“There’s nothing to forgive on that score,” Noam said.

“Then what is it? Why do you keep pushing me away? Why do you keep punishing me for doing what you’ve asked me to do?”

“If I forgave you, I’d have to forgive myself for getting old,” Noam said. “And I can’t do that. So please just bear it.”

Vadim released him, stepped away. He turned from Noam and took several deep breaths. Noam put his hand between Vadim’s shoulders. Could feel his warmth. The solidity of him. He drew Vadim into a hug and kissed his throat and his lips.

“Abide with me,” he said.

When Vadim looked up, there were tears in his eyes.

It was late evening. Vadim had convinced him to see the fabrications. His back was sore and his side hurt. His lungs burned and itched. He wanted to go home. It had been a tiring day. But he did want to see the moment when the paper dolls came to life. When they slipped those first rudimentary garments over the models and the clothes took their first steps.

Noam sat in his customary chair on the first floor, Vadim to his left. The under-assistants had arranged themselves behind the two of them, notebooks and pens at the ready. The fabricators were lined up in two rows on either side of Vadim and Noam. Vadim nodded to Una across the broad room, and she opened the east workroom door and the first model stalked out in the ghostly white muslin. The rest followed, a spectral sisterhood wearing their hypothetical clothes. Their heads were concealed by paper fencing masks with a delicate front mesh for breathing. Walking without music, just the soft whishing of the paper fabric, the lashing rain against the window. The lights were bright, unkind. Noam watched as Vadim’s vision emerged. The clothes were organic, loose, but there was still his trademark architectural touch. Everything had a sculptural air to it. He could understand how the argument moved from the skirt to the broad hips of the pants to the subtle flaring at the bottom of the blouses, the long gowns made of pinned sections that hitched over the floor, slithering like a snake.

When the last girl had come through the door, they all stood in a line at the top of the raised steps, the city behind them. It was a lovely assembly of garments, all very beautiful, but it lacked some core thing, some central idea, some final piece.

Vadim sighed. “It’s still not got it.”

“Yes, I think it needs something, but what?”

Vadim smiled at him wryly, then he nodded once more to Una, and the door of the west workroom opened, and out came a girl wearing a long, dark garment that began seemingly as a coat and then morphed into a gown. It was the garment from his drawing, Noam realised. The speed with which it had gone from something on tissue paper to this thing in front of him was startling. How strange to see it in front of him as it glided up the steps and joined its sisters.

“Oh,” he said. “Oh.”

The long, slender dark coat gave some note of contrast to the other garments. It was an inversion, not a wedding dress finale, but some gesture of grief or mourning. The end of something. But also some startling new terrain.

“We begin in white,” Vadim was saying, standing. “Yes, white and taupe. Grey. And. Rich wine colours. Wine dark. Yes, then black. We end in black.”

One of the under-assistants was hurriedly taking notes, jotting down Vadim’s murmurings as he moved from garment to garment, adjusting, hitching. Noam leaned back in the chair and watched. He was staring at his coat. Thinking about the women in the morning, when they’d stared at him as if from out of the region beyond the glass. Gazing at him from some deep, dark plane.

He stood up stiffly. And he rose up the steps and he saw that they had done the coat in a series of delicate, thin pleats. How strange, this technique. He would never have thought of it. It gave the coat a textured, feather-like quality. He ran his fingers along the papery ribs through which he could feel the model’s muscles contracting. The coat was seamed together from pieces of black fabric on muslin. The dress form itself was impeccably made for being so quickly thrown together. He ran his hand up the hip and waist of the coat, admiring how much curve they’d found despite the pleating technique. How miraculous.

He wondered when Vadim had realised that his coat had something to offer the collection. He wondered when in that brief exchange had it occurred to him to have this made. And how quickly the fabricators had worked. How diligently. How they had translated his line and gesture into measurements so precise that they’d been able to cut and assemble. But then, there were mistakes. Gaps. He could see the model’s flesh, her tender white skin. There, just above her waist, one of the pins had gone in too deep and pricked her. She was bleeding slowly into the garment. But she said nothing. Her face, like all the model’s faces, was concealed behind white cape hood. She had an animal, raw smell, like fresh milk. But there was blood. He removed the pin, and when he looked up at her, her blue eye crawled across the gauze of the mask and he jerked his hand away, startled. The bloody pin dropped to the floor.

“Noam?” Vadim called.

He stepped away from the model and joined Vadim further down the row, but the whole while, he thought he could feel the model’s eyes on him. Her breathing whispering through the muslin, carrying to him some message he could not decipher. He was afraid to look at her. Afraid that if he turned his head to glance, she would be gone, or worse, right up on him.

The sound of that breathing stayed with him even after Vadim called him a car and sent him home. It followed him up the elevator and into his apartment. It followed him into the shower and later into bed. Noam was lying on his back, his eyes closed, thinking of the dresses, thinking of Vadim, and all the night, issuing from this corner of his room or that, he could hear the rustle of the coat, the crackle of the breathing, the hitch and scratch of the segments coming free, something getting loose.

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Arts
Life&Arts

'The Adoration of the Kings' (1506-07) by Giorgione

Oh come let us adore them

Nativities | A masterpiece by Piero della Francesca returns after a three-year restoration to star in the National Gallery's peerless collection of paintings depicting the birth of Christ. By *Jackie Wullschläger*

But, my dear Sebastian, you can't seriously believe it all? . . . I mean about Christmas and the star and the three kings and the ox and the ass."

"Oh yes, I believe that. It's a lovely idea."

"But you can't believe things because they're a lovely idea."

"But I do. That's how I believe."

Evelyn Waugh, Brideshead Revisited

About a third of the paintings in the National Gallery depict Christian subjects, and most need explanation for today's audiences. But the "lovely idea" of the Nativity and Adoration is instantly comprehensible — indeed, it is through paintings that the narrative was codified and its details became familiar. The Gospels do not mention how many Magi visited or describe Joseph; it is painters who lastingly formulated the trio of kings, made one of them black and cast Joseph as old, bearded, awkward and impotent — the comic turn.

Whatever you believe, how this iconography unfolded is a wonderful story in itself, and the National Gallery through centuries of wildly imaginative Christmas paintings is beautifully able to tell it.

Its oldest picture, Margarito d'Arezzo's "The Virgin Enthroned" (1263-64), a fragile tempera panel rarely on show, includes a small Nativity in a cave where a reclining Mary, robed in blue (the most expensive pigment), gazes at the baby. But the subject is not prominent until the later 15th century, when Renaissance artists seized on its vast potential: for verisimilitude, emotional intensity, ornamentation, even political messaging.

Already in the 1470s-1490s comes tremendous diversity in approach according to regional context, creative sensibility, patrons' demands. Haarlem painter Geertgen tot Sint Jans' little nocturne "Nativity" depicts pale-faced Mary as blankly, deeply awestruck as any new mother, shining in the light radiating from her baby, while everyone else recedes in darkness. In Milan, Bramantino's grandly architectural "Adoration" positions a regal Mary in a dazzling geometry of stone cornices and doorways. Botticelli's parade of fashionable Florentines converging from opposite sides in his "Adoration" tondo was painted when the Medici were staging Epiphany processions as power displays of harmonious rule.

Giorgione in 1506 brings glowing Venetian colour: the holy family in brilliant ultramarine and gold, their visitors a play of warm chromatic rhythms. In Ferrara in 1527, the eccentric Dosso Dossi imagined the kings under a huge blood-red moon in discordant hues and distorted poses, as if they struggled to understand the miracle before them. By 1633, Poussin's "Adoration of the Shepherds" feels secular: a pastoral Arcadia in nostalgic coppery-orange, the flowing drapery, marble columns, classicised figures infused with longing for antiquity.

Amid these riches, one of the most affecting Nativities is Piero della Francesca's intimate, calm, spare rendering from the 1480s. After a three-year restoration, it returns, in what the gallery calls its "Christmas present for the nation", to hang alone in a small room, recreating as closely as possible the private devotional setting in Piero's home in Borgo Sansepolcro for which it was designed.

An aura of mystery immediately draws you. Posed before a ramshackle shed, the figures are static and strangely lack shadows. Angels strum stringless lutes. The limpid Virgin is ethereal. A single magpie surveys everything. The light across the tableau of characters and beige-green Tuscan hills and towers is crystalline yet subdued.

As often with Piero, a self-contained other world is conjured, and within it a silent centre: Mary's introspective stillness. Kneeling between the band of angels and the ruddy shepherds grouped with Joseph, inelegantly perched on a donkey saddle and looking away, she connects divine and mortal. The Christ child lies on her lapis lazuli gown, extended across the parched ground — the tactile link between mother and son.

The painting was considered unfinished until this restoration, which has not only sharpened every detail, and

Clockwise from above: 'The Nativity' (1480s) by Piero della Francesca; 'The Virgin Enthroned' (1263-64) by Margarito d'Arezzo; 'The Adoration of the Kings' (1564) by Pieter Bruegel the Elder; 'Mystic Nativity' (1500) by Botticelli

repaired damage to one of the angel's eyes, but has also, in revealing a heavenly light beam bursting through a gap in the shed roof, tilted interpretation towards the mystical. Probably influenced by St Bridget's vision of Mary painlessly giving birth while kneeling in prayer, a popular account in 15th-century Italy, Piero painted the supernatural as the real. His shadowless, miraculous scene, seemingly simple, is an ordered, perfected version of human existence.

Emerging from Piero into the surrounding galleries is to return to everyday life in its rowdy confusion, as envisioned in Flemish art. The black king splendidly dressed in white and offering a gleaming intricate boat, topped by a crystal orb — an allusion both to Christianity's wide reach and Flemish wealth and global trade — dominates Pieter Bruegel's "Adoration", packed with haggard, jostling figures. Jan Brueghel crams a whole wintry city into his little lustrous gouache "Adoration", the air crisp, the sky star-bright. Soldiers try to placate the crowds, but the news is out and people throng towards the flimsy hut. The exotic visitor and his gift are repeated here; ogled by envious locals, he stirs unease in each painting: the Brueghels are astute social commentators.

Jan Gossaert's monumental "Adoration" always astounds, every inch animated by precious descriptions of material delight — treasures of goldsmiths, metalworkers, embroiderers, weavers — beneath a heavenly host representing the immaterial. Here too the black king, proud, patient, stunningly attired, stands out in a composition whose every figure — from multicoloured angels to dogs sniffing the pavement — is individualised within a magnificent unity.

Gossaert, the first Flemish artist to visit and learn from Rome, was an example for his compatriots. One, Bartolomeus Spranger, later uniquely fused Netherlandish realism and Italian mannerism; his swaggering, satiny "Adoration" (1595), resembling a court scene with balletic kings and mischievous page boys, is a piquant curiosity.

By now, Counter-Reformation theatricality was shaping religious art, led in the 17th century by Guido Reni. In his heartfelt, overblown five-metre "Adoration of the Shepherds" — rapt

It is through paintings that the narrative was codified and its details became familiar

worshippers beneath rosy clouds of putti — the genre reaches its limits of inventiveness. Only one of the gallery's Christmas paintings postdates 1670.

Renaissance Nativities and Adorations belong to a golden moment when artists enthralled with recreating nature still worked within a sacramental culture. The National Gallery contains one tremendous, enigmatic exception: in his ecstatic "Mystic Nativity", Botticelli turned away from naturalism to a near-Gothic formal patterning. Dancing angels bearing olive branches encircle Mary and Jesus, gigantic in proportion to the other figures. Joseph curls up asleep. Small devils scurry away.

The only painting Botticelli signed, "Mystic Nativity" bears numerous half-legible inscriptions, explaining its creation in 1500 in the aftermath of "the troubles of Italy" — war and Savonarola's religious fundamentalism. But it's a painting for all time. In its exquisite artifice, coherence is won from chaos, and on the angels' fluttering scrolls the words ring out: "On earth, peace, goodwill toward men."

nationalgallery.org.uk

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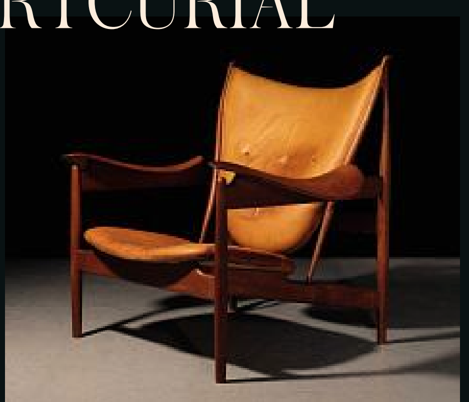

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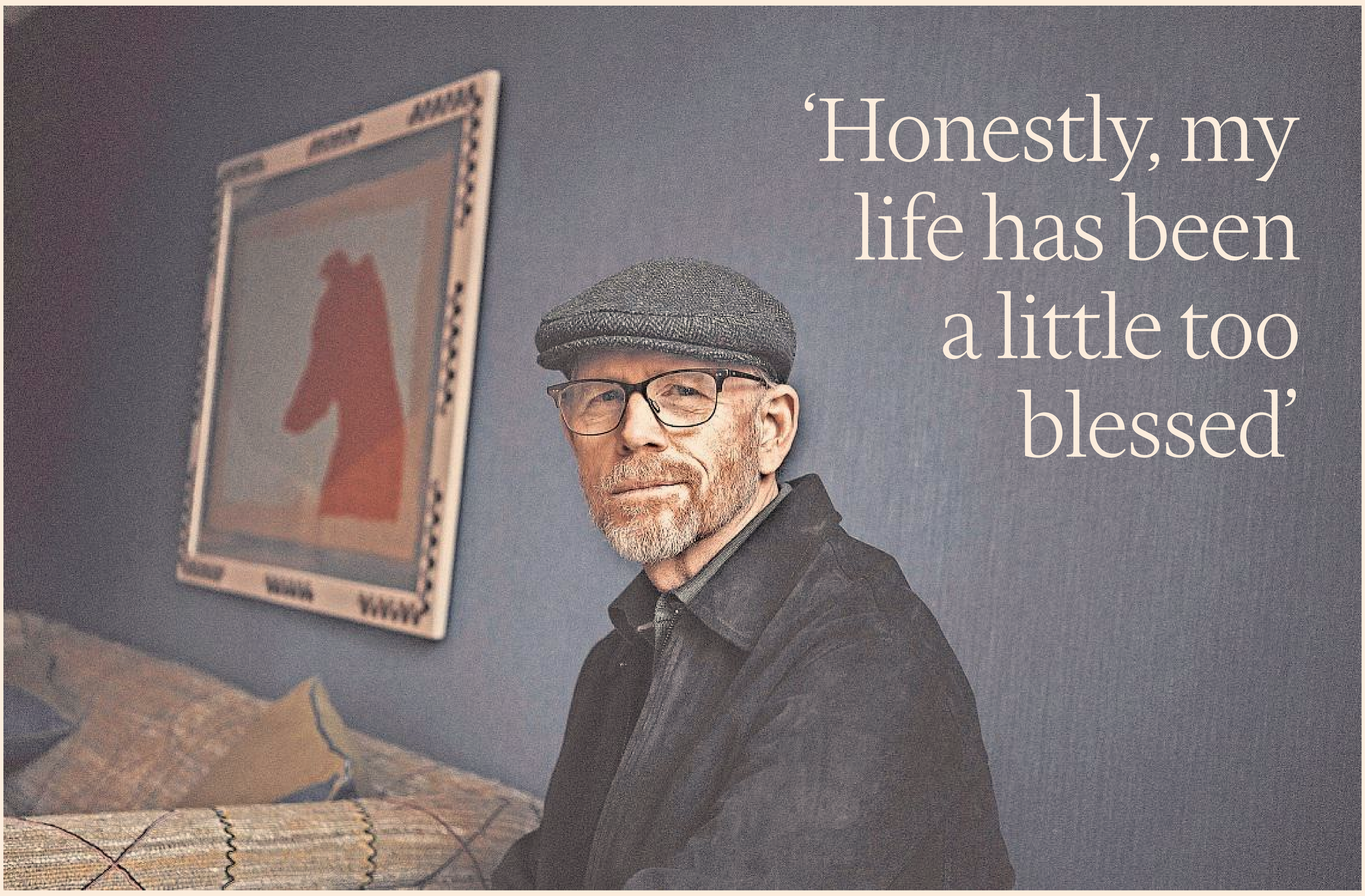
Arts

‘Honestly, my life has been a little too blessed’



Ron Howard | The film-maker tells *Danny Leigh* about his Thai cave rescue drama ‘Thirteen Lives’, why this is a ‘wonky time’ for cinema — and why he won’t be putting his own life story on screen

Times change, and Ron Howard approves. In the first 10 minutes of his movie *Thirteen Lives*, the only voices you hear are Thai. This is only natural. The film is the true story of the 2018 Tham Luang cave rescue, the mortal struggle in rural Thailand that seized the attention of the world. But Howard, 68, has made enough American movies to know that subtitling one at such length would once have been impossible. “Oh, 10 years ago, there would have been a fight. Twenty years ago, there wouldn’t even have been a fight. The whole film would just have been in English. And I really think we have to thank Netflix for making the mainstream international. This is the age of *Squid Game* and *Narcos*.”

Thirteen Lives is not a Netflix movie. (In fact, the film was released by rivals Amazon.) But Howard likes to give credit where it is due. On a bitterly cold London afternoon, he is a warm beam of old-school Hollywood optimism. If you can still just about see a trace of the young star of 1970s sitcom *Happy Days*, his manner mirrors the sturdy, feelgood films he would later direct: *Cocoon*, *A Beautiful Mind*, *Apollo 13*, *Cinderella Man*. These were movies that wanted the best for us all.

And now we are all, on screen at least, a little bit more ourselves. “For US audiences to embrace people expressing themselves in their own language, I find that so exciting as a director. And, honestly, as an American.”

Does this sound hokey in print? In person, your cynicism shrinks. Still,

Above: Ron Howard photographed for the FT by Tom Jamieson

Left, from top: Colin Farrell, Paul Gleeson and Thira Chutikul in ‘Thirteen Lives’; Tom Hanks, Kevin Bacon and Bill Paxton in ‘Apollo 13’; Howard with the cast on the set of ‘Cocoon’

Right, from top: working with George Lucas on ‘Willow’ in 1988; Howard (centre) with the ‘Happy Days’ cast in 1977 — Metro-Goldwyn-Mayer Pictures Inc; Universal/Getty Images); Alamy

Thirteen Lives does eventually take on a more western character, because so did the effort to save 12 members of a Thai boys’ football team and their coach from a flooded cave system. That rescue — ludicrously unlikely — was led by British divers Rick Stanton and John Volanthen, played in the film by Viggo Mortensen and Colin Farrell.

Tham Luang inspired a stampede of movie and TV producers. The life rights of the rescued children were bought by Netflix. (The streamer recently released a series, *Thai Cave Rescue*.) Howard’s team interviewed everyone they legally could, trusting the scale of the story was enough for multiple tellings. “The rescuers gave us a lesson in the possible. Which sounds corny, but you don’t have to be corny to convey the power of the drama here. You just show it.”

Even so, filming was a plate-spinning endeavour: a logistical migraine of an underwater shoot, with leading men who brought their own commitment to authenticity. “When they were younger, Viggo and Colin maybe coasted on their looks. These days they’re actors before they’re stars,” says Howard. Mortensen and Farrell persuaded him they should film their own diving scenes. He only learnt later that they suffered panic attacks in the process. Now he sighs like an exasperated sitcom dad. Wanting to emulate John Volthanen’s fitness regime, Farrell also lobbied the director to let him run the Brisbane marathon mid-shoot. As promised, he worked the next day. “But oh, he was fucked.”

Hearing Ron Howard swearing is as strange as you might think. But not as jarring as the role played in Tham Luang by Elon Musk, who publicly offered the rescuers an experimental mini-submarine. When the idea was rejected, he launched an ugly Twitter tirade against one of Stanton and Volthanen’s divers. Howard chooses his own words with surgical care. “I do know Elon a bit,” he says, calling the submarine plan “well-meaning”. The Twitter episode? “Unfortunate.” He chose not to reference Musk in the film but only, he says, for narrative clarity. “That stuff would just have been . . . distracting.”

Instead, the film strips events back to essentials. First screened to invited audiences in January, *Thirteen Lives* enjoyed what were reported as the best test scores in the history of backer MGM. In response, the studio planned a full theatrical release, with a high-profile awards campaign. In the interim, MGM was bought by Amazon. The new owners sent the film to streaming in August after a single week in cinemas. Howard is again intensely diplomatic. “Covid was still causing huge question marks, and they were the investors. I didn’t want them compromised.”

Yet his film had been made for movie theatres: the underwater photography state-of-the-art, the sound literally immersive. “Yes, this is a very cinematic movie. Do I wish many, many more people had seen it that way? Absolutely.”

Howard’s whole life has been tied up with the see-saw of TV and film. He began as a child actor on early 1960s TV: “Ronny Howard”, a six-year-old star of *The Andy Griffith Show*. It was the first time the medium was meant to kill off cinema. “And it dinged it. Then movies adapted.” Now he speaks too as the co-founder of a sizeable production company, Imagine, with his own stake in streaming. (His 1988 fantasy movie *Willow* is newly morphed into a series on Disney Plus.) “This is actually a great time creatively. We’re not in a moment where your only shot at getting something made is one of half a dozen studios.” He avoids the apocalyptic tone in which the future of cinema is often discussed. A happy new model is coming, he says. “We just need to get through this wonky time.”

More than the film industry has lately been wonky, of course. Amid the chaos of recent US history, even a figure as genial as Howard was caught up in the

> ‘I’m less wiped out making a film than I was at 30. Right now I really want to be ambitious’

culture war. Before *Thirteen Lives*, he made *Hillbilly Elegy*, adapted from the coming-of-age memoir of JD Vance, now Trumpian senator-elect for Ohio.

“The most extreme split I’ve ever had between audiences and critics. Which was frustrating. Critics seemed to be reviewing the adult JD Vance more than my movie.”

A life lived in show business may be the simplest explanation for taking Vance’s account of the American “left behind” as pure family melodrama, as Howard says he did.

“But the journalists saw something coming I didn’t — JD running for Senate. If I’d realised that too, I wouldn’t have pursued the project. Because it was unavoidably going to be politicised. I did ask JD about running for office, and he didn’t seem interested. He said he might write a second book. I don’t think he’s written it.” This may be as close as Howard gets to a public bad-mouthing.

For all the upheaval in the movie industry, Howard says his professional enthusiasm is still growing. “I have a lot of experience, so physically I’m less wiped out making a film than when I was at 30. Plus I’m not helping with my kids’ homework any more. On *Apollo 13*, I spent a lot of time coming home and doing 10th grade algebra. So right now I really want to be ambitious.”

One future project is ruled out, however. Howard grins when I ask if he’s seen Steven Spielberg’s cine-memoir *The Fabelmans*. “Terrific. I say that on the record.” But his own life echoes many of the same themes: a grand passion for the camera, the place of mass entertainment in hearts and minds. So would he ever make *The Howards*? The shake of the head is instant. “Movies need conflict. Steven has experienced drama. Struggle. Honestly, I think my life has been a little too blessed.”

‘Thirteen Lives’ is on Amazon Prime now

Space: the final frontier of TV misanthropy

UPSTREAM
PETER ASPDEN

The political satirist Armando Iannucci is often consoled by his admirers, who feel some sympathy for the way in which reality regularly threatens to deaden the blast of his comedy. How difficult it must be to keep one step ahead, they suggest, when events persist in taking such peculiar and toxic turns. Where could Iannucci take his comedy?

How about outside the Earth’s febrile atmosphere altogether? In *Avenue 5*, which recently completed its second season, Iannucci recasts his anthropo-scatological observations into outer space and the near future, as a luxury cruise ship, captained by Hugh Laurie (*House*, *The Night Manager*), takes a group of tourists for an eight-week jaunt round the solar system.

Things go wrong. To describe their incredible course in detail would spoil the series’ many surprises, as well as almost certainly cause offence to some sections of this readership. Suffice to say that Iannucci and his team let loose with caustic glee, revelling in the absurdity of their barmy plot twists.

Jokes and insults rebound loudly and fiercely between passengers and crew. (There is also a pretend “crew”, one of many layers of meta-play.) Not a single element of modern life remains unridiculed: government, media, artificial intelligence, power-hungry corporations, New Age therapists. The humour is fast, coarse and full of unlovely wordplay: a plan to destroy half the passengers (don’t ask) is described as a “semicide”.

The only thing lacking in the entire enterprise is any character who is remotely sympathetic. This is not necessarily a new development in Iannucci’s work, but rarely has it been taken to this extreme. The nearest nod to humanity here lies in Laurie’s hapless captain, whose scepticism of the powerplays around him is soundly based, but

Below: Hugh Laurie as the captain of a luxury cruise space ship in ‘Avenue 5’
Sky Max / HBO

who is also overwhelmed by his own world-weariness.

Avenue 5 is hardly alone in its misanthropic intentions. There is no heroic figure amid the self-regarding protagonists of *Succession*, a series that raises family dysfunctionality to new comic heights; nor in *The White Lotus*, which persuasively contends that a certain section of the super-rich are no less obnoxious at play than they are at work.

All of these are scripted with craft and acted with relish. But they don’t offer much in the way of consolation. Brian Cox, *Succession’s* scabrous Logan Roy,

> The moon and stars were our ultimate refuge, the virgin locations where we could, in theory, start again

once told me that he was often asked by people to shout “fuck off” into their phones, and not to spare the sociopathic gruffness. Notwithstanding the excellence of his performance, and the programme in general, is there not a pantomime element to unrelenting nastiness?

One counterargument might be to say that we live in very nasty times. There are clear references to British political life in *Avenue 5*, such as when an impromptu election is called following the passengers’ loss of confidence in the captain. A random group of candidates emerges — “a tsunami of the subpar” — to contest the poll with no apparent motivation other than naked opportunism. A poll puts a handsome crew member ahead because, one competitor observes, “you are saying nonsense confidently and you have cheekbones”.

In taking these bruising stories into space, the makers of *Avenue 5* break a taboo. The moon and the stars were always our ultimate refuge, the virgin locations where we could, in theory, start again if things got too rocky down here. What could be nobler than to explore, explain and export our most decent values?

But it turns out that our funniest TV shows are telling us something entirely different: that our narcissism and greed are boundless. It is a sobering message for the time of year. Nothing stills a laugh more than the nagging thought that we shouldn’t be laughing at all.

‘Avenue 5’ is on Sky Atlantic and NOW in the UK and HBO Max in the US

Arts

Climate change | No longer only for documentaries, the environment is at the heart of drama today, says *Gabriel Tate*

The new green screen

With its constant danger and cross-section of society, an oil rig offers such a rich crucible for drama that it's surprising it hasn't been exploited more often. Now, first-time screenwriter David Macpherson has made it the setting for an Amazon Prime series that combines spectacle, supernatural mystery and explicit environmentalism. Its concerns range from the global — climate change, fossil fuels — to the local — the continued dependence of the riggers and their Scottish community on North Sea oil. The workers are, as the script puts it, "fossils digging fossils".

With *The Rig*, Macpherson joins a growing number of TV writers placing the climate crisis at the heart of their work. Their forebears are few in number. The early 1970s brought the BBC series *Doomwatch*, in which rogue scientists tackled plastic waste and air pollution, while the landmark 1985 series *Edge of Darkness* couched Gaia theory and cold war nuclear dread in a crime-cum-espionage thriller. But barring these occasional exceptions, environmental issues were largely ignored by broadcasters, who perhaps considered the subject too dense, dry or associated with activists and best left to news reporters and documentarians.

Since the early 2000s, however, as the sense of urgency has intensified, Hollywood has mined environmental concerns for big-budget movies. *The Day After Tomorrow* (2004), *Avatar* (2009) and *Geostorm* (2017) use the opportunity to demonstrate advances in CGI, the warning to humanity a handy fig leaf. TV and lower budget films couldn't compete or didn't even try. A 2022 survey by California's Media Impact lab found that only 2.8 per cent of more than 37,000 scripted US film and TV shows between 2016 and 2020 even mentioned "global warming", "fracking" or 34 other climate-related phrases.

Amazon's series 'The Rig' contains the line, 'If you keep punching the Earth, it's going to punch back'

But over the past few years there have been more serious attempts to engage with the issues, reflecting both a wider acceptance of the facts and growing interest among audiences.

The results have been mixed. Meteor-as-metaphor satire *Don't Look Up* (2021) got lost in its own cleverness and giddy on star power. *The Trick* (also 2021) had the opposite problem: covering the 2009 hacking of Climatic Research Unit emails, the BBC/PBS show betrayed its public-service origins by being sober, scientific and slightly dull. Sky/HBO's 2019 series *Chernobyl*, however, was a superb balance of intimate human drama and horrifying environmental catastrophe. Meanwhile, several high-profile TV series have used the climate crisis as a topic of the week (*Grey's Anatomy*, *Doctor Who*) or a peripheral issue to the central narrative (*Reservation Dogs*).

The boldest and most imaginative interpretations have come mainly from countries on the frontline of the crisis: examples include the 2020 Norwegian fantasy series *Ragnarok*, in which Thor is reincarnated as a teenage boy who wreaks revenge on those destroying the planet, and 2019's *Frontera Verde*, a supernatural crime thriller set in the Colombian rainforests. Most notable was this year's revival of Danish drama *Borgen*, in which flawed politician Birgitte Nyborg attempted to square the circle of community, economy and environment when oil is discovered underneath Greenland.

The common thread linking most of these shows has been the involvement of Netflix but others with comparable financial and creative heft are catching up. Apple TV Plus has developed the upcoming anthology series *Extrapolations*, with Meryl Streep, Kit Harington and Marion Cotillard among those playing people investigating the human impact of climate change.

But before that comes Amazon's *The Rig*, which stars Iain Glen, Martin Compston and Mark Bonnar as members of the crew of an offshore rig cut off from the outside world by a mysterious fog that presages a series of increasingly alarming, seemingly supernatural events. It is equal parts workplace thriller and eco-horror, but it was important to Macpherson not to demonise riggers themselves and to reflect their predicament.

"I wanted to tell that global story [of climate change]," he says. "But one of the things that gets missed is the impact on everyday people in these facilities. The rounds of industrial decline in the UK haven't always been managed well. If this industry comes to an end, I hope people are much better looked after and their skills properly valued."

Ironically, this drama about an old, fossil-fuel-driven industry was filmed in a factory once hailed as housing the future of renewable energy. Pelamis Wave Power on Edinburgh's Leith Docks was a pioneer in offshore wave energy before going into administration in 2014. (The building subsequently reopened two years ago as a cavernous new studio complex.)

Macpherson is well qualified to write about rigs and environmental matters. His father worked on an offshore platform for many years and Macpherson has an MA in environmental studies and has worked with non-profit organisations on climate change. "If we could capture the same sense of pride in the engineering of renewable technology as we did in the engineering of these rigs, Scotland could be a world leader in a new field," he says.

But not all those involved in the series are experts. Emily Hampshire, best known for playing Stevie in the hit sitcom *Schitt's Creek*, here plays Rose, geologist and oil company rep. She admits that she knew little about offshore drilling when filming began.

"Rose has to explain the science in a way that is engaging and not a lecture, which I struggled with at first," she says. "Then I started reading a book about mass extinctions called *The Ends of the World*, and it just clicked. The line [in *The Rig*]: 'If you keep punching the Earth, it's going to punch back' made real sense."

"We're asking what happens when we excavate sea beds, releasing what nature has created," ponders her fellow actor Glen. "But also taking a step further back and looking at the source. It's only after horrible disasters that humanity tends to think, 'Maybe we shouldn't have been doing that.'"

So is it hopeless? Macpherson thinks not, and is conscious of the role of dramas in forcing viewers to face a few inconvenient truths. "I think it would be a disservice to avoid it," he says. "We're in the age of climate change and things are going to get worse. If writers aren't putting that aspect in their story, are they really reflecting the world as it is?"

'The Rig', Amazon Prime from January 6

Clockwise from main: two scenes from new series 'The Rig'; scientists tackle nuclear leakage in 'Chernobyl'; 1985 series 'Edge of Darkness'; and (far left) a scene from the Colombian-set series 'Frontera Verde' — Alamy; Sky UK/HBO; Netflix

THE LIFE OF A SONG

WALKING IN THE AIR

First broadcast on the new Channel 4 on Christmas Eve, 1982, the animated film *The Snowman* celebrates its 40th anniversary this year. The 26-minute work was based on Raymond Briggs' 1978 picture book about a boy who goes on a magical adventure with a shortlived snowman. Producer John Coates commissioned composer Howard Blake to write an orchestral score, in which a key element was the song "Walking in the Air".

At the time, Blake was recovering from burnout. The "mayhem" of turning out music for television commercials had brought him "to the brink of collapse", he told Metro last year. So he rented a beach hut in Cornwall for three months to recuperate. He was walking along the beach when the melody of "Walking in the Air" washed up in his mind like driftwood.

He scribbled it down on the back of an envelope. In 2009, he told The Times he thought he might incorporate it into "a symphony that expressed the complete innocence and beauty that we are all born with. It felt as though the idea came from God."

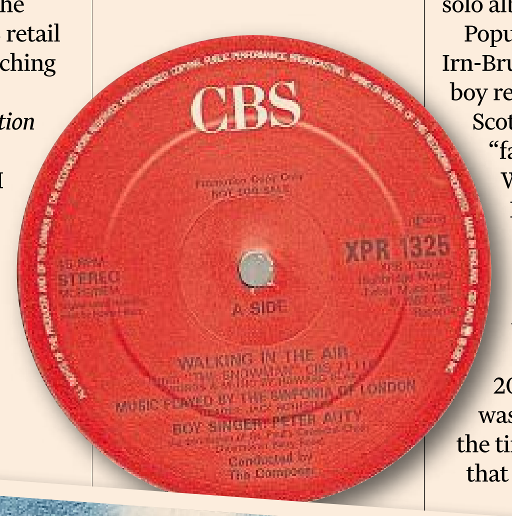
Briggs' tenderly drawn tale of love and loss was wordless and Blake told Coates that the film should be led by music alone, with no dialogue. Coates was unconvinced, but Blake recorded a basic piano demo of the song and sent it to Channel 4 boss Jeremy Isaacs. Blake knew immediately that the scene in which the Snowman takes the little boy flying from England's South Downs to the North Pole was the perfect place for his beach tune and he thought that using a chorister would dial up the song's innocence and spirituality. It was called "Flying in the Air" until he took a trip to the park and, watching the happy strollers, realised that "Walking in the Air" had a more magical ring.

Although many people think Welsh choirboy Aled Jones sang the song in the film, the original version was recorded by treble Peter Auty (who was paid £300). Auty was left off the credits in the rush to finish the animation. In 1985, Jones, then 14 years old, was drafted in to re-record the song for a TV commercial for US retail chain Toys R Us, which was launching in the UK.

Jones told the *White Wine Question Time* podcast: "By then I had released, I think, 12 albums. So, I was the boy on the block, if you like. I'd only learnt 30 seconds [of the song] for the ad." But as the producer John Altman had booked three hours of studio time, he suggested they record the whole song. To everyone's surprise "Walking in the Air" soared to number five in the charts, turning Jones into a household name.

Jones was lucky that his early fame did not damage him. Last year, he told Reader's Digest: "Monday to Friday, I was a normal, football-playing comprehensive schoolboy, then the weekend would come and I would be jetting here, there and everywhere meeting my heroes. I had the best of both worlds."

'The Snowman' is 40 this year Allstar Picture Library/Alamy



The teenager sang at Bob Geldof's wedding to Paula Yates in Las Vegas in 1986 and stood next to David Bowie in the couple's wedding photos.

The song has since been recorded by more than 40 artists. In 1998, Finnish symphonic metal band Nightwish gave it heavy rock-operatic bombast. Frontwoman Tarja Turunen leaned into the drama of lines such as "Suddenly swooping low on an ocean deep/Rousing up a mighty monster from his sleep".

Their version topped the Finnish charts for a week in 1999. In 2004, Chloë Agnew (of Irish band Celtic Woman) recorded a more delicate, harp-backed cover for her second solo album.

Popularity bred parodies. In 2006, Irn-Bru ran a commercial in which a boy refused to share his can of the Scottish soft drink and ended up "falling through the air". In 2017, Welsh prankster rappers Goldie Lookin Chain sampled the song as the backdrop to their drug ballad "Paranoia", mumbling: "The police are over there/I tried to hide my vacant stare."

To celebrate *The Snowman*'s 20th anniversary in 2002, Auty was finally added to the credits. "At the time, it didn't really bother me that everyone thought it was Aled," said Auty, who went on to enjoy a successful career in opera.

"I was happy to be anonymous, but I think my mum and dad were miffed on my behalf. But it's great to have my name on the film after all these years. I'm really pleased people will now recognise it was me."

Helen Brown

More in the series at ft.com/life-of-a-song

Review

THEATRE

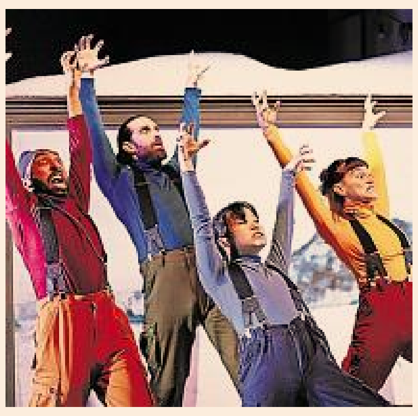
Snowed In
The Place Theatre, London
★★★★☆

It's 10.30 in the morning. A very small, very chatty six-year-old is kicking the back of my seat. Meanwhile, the nice lady in charge of The Place's schools matinee has just announced that the theatre has a strict no-shushing policy. So far, so ghastly (or so I thought) but *Snowed In*, Anatomical's four-person Christmas show, proved an absolute delight: funny, engaging and weighing in at a fidget-proof 60 minutes.

Snowed In's performers kept their audience gripped from the start. The story, told in a mix of speech and movement, is simple but involving: four friends imagine being snowbound in a luxury hotel and run riot through the rooms and lifts and corridors.

Will Holt's minimal set — giant Alpine postcards and a mini-ziggurat of carpeted stairs — easily evokes both indoor and outdoor settings, aided by Chris Swain's cleverly zoned lighting. Gareth Ellis Williams's soundtrack is a nutty mix of yodelling polkas and elevator jazz plus a blast of the BBC's old Ski Sunday theme when the fearless foursome mime a bobsleigh ride down the hotel laundry chute.

Writer/directors Anna Williams and Tom Roden have packed a fair amount of dance into the hour but both are clearly hyper-aware of their audience's boredom threshold. Tots weaned on TV dance competitions know to whoop when spring-driven Lisa Chearles Ming Huey slides into the splits, but the ensembles are leavened with plenty of very clever, very silly audience participation. When Andy Gardiner divides the house into "guests" and "staff", the parody curtsies in the "staff" section would have given Meghan Markle a run for her money. The moment Deepraj Singh began his beatboxing number, Friday morning's schoolchildren were in the groove, gleefully supplying the "sizzle-sizzle-mash-mash" of the hotel kitchen. Every hand shot up when volunteers were needed for the ballroom scene and everyone bagged a snowball for the battle between stage and stalls.



'Snowed In' performers — Zoe Manders

Lesser writers might have been tempted to smuggle an eco-message into those snowballs but this fun-filled romp is that rare thing: a 21st-century children's show with no moral whatsoever. There was a cod-serious moment during the finale when we were all reminded not to forget "the real meaning of this time of year . . . " — suspenseful pause — "PUDDING!" followed by a reprise of a mad, bowl-stirring, tummy-rubbing routine to send everyone home happy.

No children? Rent some.

Louise Levene

To December 24, theplace.org.uk

Arts | Collecting

Three Rs raise the bar for Old Masters

Auctions | January's sales profit from rediscovery, restitution and reattribution. By *Susan Moore*

Death, debt and divorce — the three Ds — are always said to be the drivers of the art market. To this one should surely add the three Rs — rediscovery, restitution and reattribution. In recent years, both have delivered the crucial masterpieces that are the lifeblood of any market, especially that for Old Masters. Take the £45mn paid at auction for the rediscovered "Massacre of the Innocents" by Rubens in 2002, or the €23mn last May for a Michelangelo drawing of a shivering naked man which had resurfaced in a French collection after more than a century.

Rediscovery, restitution and reattribution also provide some of the highlights of January's Old Master paintings sales in New York. "Portrait of a Young Man with a Quill and a Sheet of Paper" is a restitution that comes to the block at Sotheby's with a reattribution to the great 16th-century Florentine painter and poet known as Bronzino, court artist to Cosimo I de' Medici. Carlo Falciani, a professor at the Accademia di Belle Arte in Florence, has proposed that it may be an early self-portrait, the Latin verse the sitter has penned perhaps suggesting a contemporary *paragone* or debate on the rival pursuits of literature and art.

An old auction label on the back of the panel reveals an early attribution to the artist through its 17th-century owner, Sir William Temple, diplomat and patron of the young Jonathan Swift. The labels and numbers here are like stamps on a passport, enabling a piecing-together of its travels and changing critical fortunes. "1400" turns out to be its inventory number for Hitler's proposed *Führermuseum* (when it was attributed to Jacopino del Conte), "K1468" refers to the Kremsmünster Monastery, where paintings were taken for protection from Allied bombing. The painting, it transpires, had been acquired for the Reich Chancellery by Hitler's influential decorator, Gerdy Troost.

Perhaps the most poignant aspect of what Lucian Simmons, Sotheby's head of restitution, describes as a "very, very sad but wonderful story" is that research on the painting reclaimed a lost identity. Ilse Hesselberger (née Wertheim), an heiress of Jewish ethnicity but Protestant faith, bought the painting — as a work by Francesco Salviati — in 1927. After ensuring the safe passage of her daughter Trudy to New York in 1938, she returned to Munich to see her property forcibly sold or confiscated and was obliged to contribute towards the building of a transit camp before being deported herself and murdered in a concentration camp in 1941. "The Nazis killed her and her memory,"

> The portrait was hanging in a government building in Berlin before it was restituted early in 2022

says Simmons of the struggle to find out anything about a woman who turned out to have been an avid art collector.

The portrait was hanging in a government building in Berlin before it was restituted early in 2022 to the estate of Ilse's daughter, who tragically knew little of her mother. Dirt and discoloured varnish removed, it comes to the block on January 27 (estimate $3mn-$5mn).

The identities of unsigned works of art are easily lost, as the sales history of a Christie's rediscovery this January bears witness. Here, however, the painting is a large-scale preparatory work (est $2.5mn-$3.5mn) for Jean-Antoine Watteau's most romantic painting, "Pilgrimage to the Isle of Cythera", his reception piece for the Académie Royale delivered in 1717. It, too, had been confiscated by the Nazis but was restituted to the dealer Georges Wildenstein in 1946. Its last auction appearance, at the Hôtel Drouot in 2018, described it as "circle of" Watteau.

For those who doubt the reattribution, radiography reveals that the composition was painted over an abandoned version of the artist's "Holy Family", now in the State Hermitage Museum in St Petersburg, and reveals many changes of mind in constructing this second composition. Moreover, a three-coloured chalk drawing exists for the most highly resolved figure among the pairs of lovers — the hesitant young woman in lost profile who is being coaxed towards the shore.

A small jewel of a painting at Christie's is the meticulous oil on copper "Summer Landscape with Tilt-Carts" by Jan Brueghel I, signed and dated 1612 (est $3mn-$5mn). The sale's top lot, however, is a real market rarity, a pair of Goya portraits (est $15mn-$20mn).

Peter Paul Rubens takes centre stage at the Fisch Davidson Collection at Sotheby's on January 26. Presiding over this feast of 10 Baroque paintings is an early work, the macabre "The Head of Saint John the Baptist Presented to Salome", another documented "lost" piece that emerged on the French market, in 1987, as "atelier PP Rubens". It is estimated at $25mn-$35mn.

It is rare to encounter such a distinctive Old Master collection as that amassed with purpose and commitment over the past 30 years by Mark Fisch, a retired property developer and Metropolitan Museum board member.

"Mark Fisch went from 0-100 in 10 seconds," says Sotheby's Christopher Apostle, head of the Old Masters department. "He really studied, worked at it, tracking down paintings in private collections." Either by preference or expediency, Fisch chose images that the faint-hearted may have avoided. We find an anguished Jacob holding up the bloodied cloak of his son Joseph (a Guercino rediscovery of 1995, est $1.5mn-$2mn) and Christ humiliated at the hands of brutish soldiers (Valentin de Boulogne, est $4mn-$6mn).

Yet even Judith gloating over the severed head of Holofernes (Giulio Cesare Procaccini) cannot compete with Rubens' panel featuring the chill triumph of Salome and the visceral gore of blood gushing from the Baptist's decapitated body, The work is dated to the great period of Rubens' return to Antwerp from Italy with the lessons of Caravaggio, Michelangelo and Tintoretto still vividly in mind.

Not everything here bears an attribution. The exceptional "Young Man Asleep Before an Open Book" from the circle of Rembrandt (est $500,000-$700,000) continues to confound the experts. Quality speaks for itself.

Despite the reassuring authenticity guarantees now offered by both auction houses (with disclaimers), unsigned or undocumented Old Masters will remain at the mercy of fluctuating scholarly opinion, just as long-hidden gems will continue to turn up at auction.

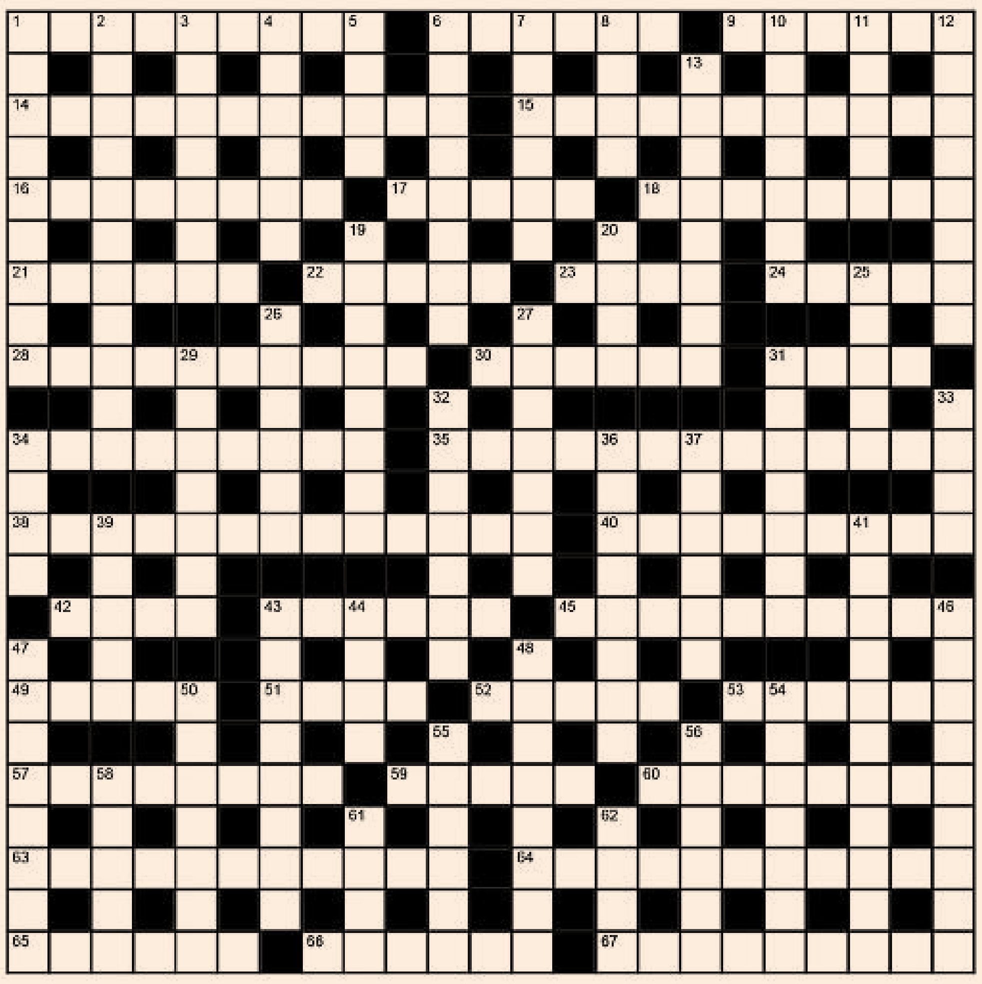
Left: 'Portrait of a Young Man with a Quill and Sheet of Paper' by Bronzino (est $3mn-$5mn)

Above: 'Pilgrimage to the Isle of Cythera' by Jean-Antoine Watteau (est $2.5mn-$3.5mn) — Alamy

'The Head of Saint John the Baptist presented to Salome' by Peter Paul Rubens (est $25mn-$35mn)

Diversions

CHRISTMAS CROSSWORD No 17,286 SET BY GOZO



The 26 alphabet clues lead to two sets of thirteen solutions: one set consists of two-word names or phrases, each of which begins with the letter indicated (eg Harry Houdini). The other set leads to solutions which are two-syllable words with each syllable starting with the letter indicated (eg Hogshead). These solutions have to be entered into the grid, wherever they will fit.

A Bandmaster Louis as TV quiz host (9,9)
B Dancing Girl's line in Sussex (8)
C Transport taking fifty people up? (5,3)
D Bonnie city's cake (6)
E Segregate bubbly and chocolate gift (6,3)
F Paw that's 48 inches long, we hear (8)
G Bogart, shaking with rage, with lonesome US actress (5,5)
H This chap will sink his putt in the pit (8)
I Calligraphy requisite in kind, in a novel (6,3)
J Callow stammerer's thirty days (6)
K Chocolate bar could be a Club (3,3)
L Lecturer would somehow get drunk in Shropshire town (6)
M Space not affected after planetary battle (7,4)
N Material from Indian gown regularly removed (5)
O Ten lovely nuts for sailor's girl-friend (5,3)
P Drive priest by car (6)
Q Caesar's V-sign? (7)
R Venue for fire-drill? (5,5)
S Fish-slice? (6,5)
T French head drinking English wine wavered (8)
U Trimble, say, in overcoat, supported by TU member (6,8)
V Victor in rocky ravine finding medicinal plant (7)
W Songbird or bat next to wide broken barrel (6,7)
X Half a dozen with king in ancient Rome turned up for Darius' successor (6)
Y One plaything or two playthings sent back without their lids (2-2)
Z Wigan playing with two unknowns score in Munich (7)

ACROSS

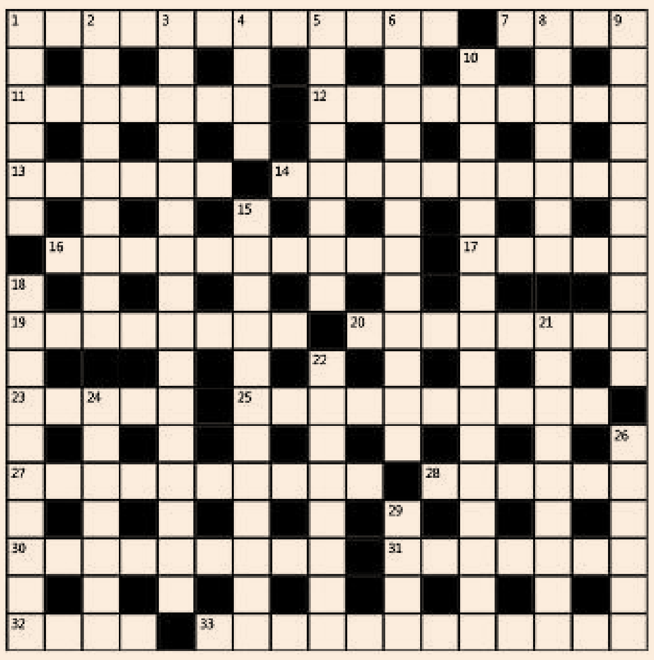
6 Transferring office documents is drudgery, holding nothing back (6)
15 70s' fad, using old lorries across Cuba (6,5)
17 Many times decimally (5)
21 Stupid baronet in river (6)
24 Litter in American saloon (5)
31 Contest woman's opinion (4)
34 PC's part in detective's fraud campaign (4,5)
38 Money on counter for pocket calculator (5,8)
42 Sketchy sky clearing, so eat out (4)
43 Honorary secretary in university departs (6)
45 Driving technique that may get man with antelope to Spain (4,3,3)
51 High liver from the heart of Tibet? Wrong (4)
52 Woodland god posed on your right, for starters (5)
53 Peers sign? (6)
57 Stumbling - a result of taking LSD? (8)
60 Dog at gym - family facility, we're told (8)
64 Waiters for the movies (6,5)
67 Yank following focus on plane used in missile practice (6,3)

DOWN

2 Zeal shown by new eastern head (11)
3 Player, amateur, caught by Lock (7)
5 Speaker's blunt and cross (4)
8 Duck on eastern river (4)
10 Peel off topless summer clothing (7)
11 Cotton thread one's placed in heart of galleon (5)
12 Download dodgy undeveloped site (8)
19 Chance of stardom potting many balls? (3,5)
20 Improper noun, not socially acceptable (3-1)
25 Live and prosper, losing nothing (5)
26 Soldier - one buried during WW1 battle (6)
27 Those lumberjack chaps! (7)
29 Why clad in tatters in theatre? (7)
33 Hike three kilometres in Italy (4)
34 Oil is somewhat undervalued (4)
37 Whisky and beer-drinking daughters walk unsteadily (6)
39 Do something about London district (5)
41 Tenth native turning out. Should it happen? (2,4,5)
44 Not half charming claim (4)
47 Records in detail, but enters this solution incorrectly? (6,2)
50 Go off with PC in river (7)
56 Conductor Norman in Californian beach town (3,3)
58 John takes one grand home (5)
61 Cosmetic treatment in IOM town (4)
62 Wader's granny? (4)

Solution 17,280

POLYMATH 1,210 SET BY FALCON



ACROSS

1 Musical instrument resembling the cello (5,2,5)
7 Omar, actor who played Dr Eric Foreman in the medical drama series *House* (4)
11 Sir Jackie, Scottish racing driver (7)
12 Having or involving three colours (9)
13 Play written by Jessica Goldberg (6)
14 Song written for the soundtrack of the 1978 animated film *Watership Down* (6,4)
16 Black or red Australian insect with a vicious sting (7,3)
17 Earl, American jazz pianist and bandleader (5)
19 German shepherd (8)
20 46th President of the United States (3,5)
23 Stage name of the French pop-soul artist Nadia Mladjao (5)
25 Raised reservoir of water maintaining pressure in a plumbing system (6,4)
27 1847 battle of the Mexican-American War (5,5)
28 Surname of the Scottish singer-songwriter Donovan (6)
30 Breed of horse, originally from America, typically having a spotted rump (9)
31 In the Old Testament (II Samuel), the third son of David (7)
32 Single by Prince and the Revolution, from their *Parade* album (4)
33 Stephen Sondheim musical (4,3,5)

DOWN

1 Giorgio, Italian artist and art historian (1511-74) (6)
2 Pulitzer Prize-winning novel by Willa Cather (3,2,4)
3 1990 film directed by Jane Campion (2,5,2,2,5)
4 Type of US mortgage with interest rates determined by credit risk (3-1)
5 Genus of sea stars (8)
6 Romantic comedy film series based on novels by Helen Fielding (7,5)
8 Brightest star in Canis Minor (7)
9 Album by Rick Roberts, released in 1973 (3,2,1,4)
10 Farce written by Joe Orton (4,3,6,3)
15 1946 film starring Olivia de Havilland (2,4,3,3)
18 Johnny Cash album, released in 1971 (3,2,5)
21 Florentine sculptor (1386-1466) (9)
22 Capital of Chile (8)
24 See 26
26/24 German Augustinian monk, author of *The Imitation of Christ* (6,1,6)
29 Barbara, actress who played Anya Amasova in the Bond film *The Spy Who Loved Me* (4)

You can now solve our crosswords in the new FT crossword app at
https://app.ft.com/crossword/crossword_index

Solution 1,209

Three falls in the Alps

Xenia Minder was tethered to her partner when they fell 200 metres in a lethal mountaineering accident. That began an almost unbelievable new chapter in her life

I wake up in a hut in the Swiss Alps, excited. It is April 2011 and my partner Erhard and I are about to complete a 10-day trek to celebrate his birthday. He is turning 52 today.

The ascent is not particularly challenging, but it is long. We set out before sunrise to ensure we reach the Grünhorn's 4,000-metre summit with time to enjoy views of the Aletsch glacier, the largest in the Alps. As we adjust our head torches in the dark outside the hut, I notice, for the first time, the skull and crossbones stitched on to Erhard's woollen hat. He sees me staring and chuckles, joking that, when the time comes for the final journey, everyone should be prepared.

We cover the first part of the climb on back-country skis, which have skins glued to the bottom to create a strong grip on the soft snow. Once the slope gets steeper and icier and the wind picks up, we swap the skis for crampons, tie ourselves together at the waist with rope and start to use our ice picks. We walk slowly along the ridge that leads to the summit, and I try to follow Erhard's footsteps more closely. As always when we climb, Erhard is leading.

Then our rope is jumping around wildly, and the blue walls of my childhood bedroom surround me. I can see huge black rocks below. "Darling, it's over," I say. "I hope it won't hurt too much." The words are clear, but there is no sound.

When I open my eyes, I'm lying down. Everything is white. I don't feel scared, just incredibly tired. I know that falling asleep might lead to fatal hypothermia,

> The first time I climb with Erhard, he offers no words of support. We walk for nine hours in near-total silence

but I close my eyes. It is peaceful and very quiet. I no longer feel my body, because I'm no longer a physical person, just a floating spirit bathed in sweet, white light.

We have fallen more than 200-metre, after I slipped on the ice, hurling my partner into the void with me. Did he do something at the last minute to ensure he would hit the jagged cliff wall and that I would, instead, bounce off a snow patch? Did he even have time to think before our tether violently yanked him off his feet? All I know for sure is that this accident begins a miraculous new chapter of my life.

One of these miracles is the mountain guide who has been following our footsteps to the summit. He makes an emergency call as soon as he realises the tracks have abruptly disappeared close to the cliff's edge. I spend at least five hours unconscious in the deep snow amassed by the wind at the bottom of the cliff before a rescue helicopter flies me to a hospital in the city of Sion, 40 miles away.

I come close to freezing to death, but the doctors are amazed by how little damage my body suffers from the fall. No vital organ has been injured. My legs are unbroken, my skull intact. The diagnosis is a broken wrist, a broken vertebra and several broken ribs. Erhard is dead. The helicopter also transported the body of the man I loved. He was found lying in the snow next to me, still tied to my waist. I never realised that he had been right there, within touching distance.

It is not the last time I will fall.

Erhard Loretan was one of the world's most acclaimed climbers, the third man to summit all of the planet's 14 peaks more than 8,000-metres in altitude, after the Italian Reinhold Messner and Jerzy Kukuczka, a Pole. Erhard never used bottled oxygen and was admired among fellow mountaineers for pioneering the so-called "night-naked" style, carrying as little equipment as possible to climb faster, including through the night hours. In 1986, Erhard and another Swiss climber reached the top of Everest and back in only 43 hours, without rope and taking just half a litre of water each and a few chocolate bars, before sliding back down on their bottoms to base camp. Messner called their Everest climb a work of genius. In its obituary, The Daily Telegraph quoted Peter Hillary, the son of Everest's first conqueror, comparing Erhard's approach to mountaineering to somebody climbing the outside of a skyscraper by "following grooves in the concrete and glass".

As much as he loved pushing the boundaries, Erhard struggled with the attention his exploits generated, particularly in his native, mountaineering-obsessed Switzerland. Once he got too old to set new records, he returned to regular mountain guiding and kept a low profile. In private, he would sometimes express disdain for unprepared mountain tourists, who he viewed as dangerous to their guides and other climbers, as well as harmful to the environment.

I was very much one of these tourists, compensating for my lack of technique with endurance and determination. Since my teenage years, I've always tried to see how quickly I could go from zero to advanced, whether practising a new sport, such as climbing, or learning a complicated language, such as Russian or Arabic. And when I find a guide or a teacher inspiring, then I really develop the belief that I will succeed.

I begin mountaineering in earnest in 2008 and immediately catch the bug. Having long loved horse riding, I swap afternoons galloping bareback across the countryside outside Geneva, where I work as a judge, for weekends climbing the Alps. Each climbing season, I manage longer and more complicated ascents with the help and encouragement of a handful of professionals.

The first time I climb with Erhard, who steps in to replace one of my regular guides, he offers none of the usual words of support. Instead, we walk for nine hours in near-total silence. Erhard never stops or turns around to check on me. Once I understand the marching order, I decide to follow him and keep my mouth shut, however unpleasant it feels not to even get a toilet break. I think I win his admiration, even if he never admits it. Within a few months, the challenge of keeping up with him turns into love. I now spend my weekends in his mountain chalet in Gruyère, his home region, or in the camper van Erhard uses to criss-cross the Alps.

We are in love, but there is a distance. Erhard often keeps to himself and rarely speaks about his past. I respect his privacy, well aware of the tragedy that occurred almost a decade earlier. One evening Erhard was alone with his and his then-partner's seven-month-old son, Ewan. Upset by the infant's crying, Erhard shook him violently and put him back in his cot to settle down. Ewan died the next day, on Christmas Eve. In 2003, Erhard received a suspended prison sentence of four months for negligent manslaughter. His trial shocked Swiss society, while also raising public awareness of shaken baby syndrome, the type of brain injury that can be fatal in babies and toddlers.

On one of the rare occasions when we talk about Ewan's death, Erhard tells me that the sentencing, as well as the media and public opinion, felt like nothing compared to the judgment of his own conscience and the horror of knowing that he is a father who killed his son. His words strike a deep chord within me, particularly since I am a judge.

About the photography: Olivo Barbieri is an Italian artist, widely recognised for his techniques of creating otherworldly aerial landscapes by employing a shallow depth of field with a tilt-shift lens. The work in this piece, from the project "Alps — Geographies and People" (2012-2019), explores how a mountain is perceived from the climbers' point of view. All the proportions, rock formations and people in these photographs are real. More images online at ft.com/magazine

Following Erhard's death in 2011, I find it ironic that I'm also forced to live my personal drama in public. After initially refusing to speak to journalists from my hospital bed, I decide to write a column for a Swiss newspaper to pay homage to Erhard but also to question the concepts of risk, guilt and how tragic events are interpreted by the law. My fall was immediately ruled an accident by the Swiss judiciary, but what would have happened if I had died and Erhard had survived? Could he have been found guilty of negligent manslaughter once more? In my writing, I also wonder if I somehow became a judge in order to question the purpose and the meaning of justice itself. I come to call this belief "reverse causality", the idea that the present can explain the past, rather than the other way round.

Despite my new doubts about my profession, I feel that I need to return to work as soon as possible. Three weeks after my accident, I schedule a court hearing and get back to my judge's chair. My career is not in jeopardy, but my unexpectedly prompt reappearance isn't welcomed by all, and I soon find out that some of my colleagues are arguing that I'm not in the right state of mind to administer justice. I confront the president of the Geneva courtrooms, who acknowledges that he also finds it hard to understand why I'm back at work, when some other judges take days of sick leave just to nurse a cold. I tell him to trust me, that I can go home if I don't feel up to the job. But my private health insurance also insists that a psychiatrist must determine whether I'm fit to work. My sessions with the psychiatrist prove uneasy, especially after I refuse to take the antidepressants he immediately wants to prescribe. We eventually reach a compromise whereby I agree to work part-time.

One good thing comes of my meetings with the psychiatrist: our negotiations help me realise that the part of my work that I really appreciate is mediation, getting people to agree to disagree, so that they can settle out of court without wasting more money on lawyers and more time on appeals. Increasingly, I see justice as an elaborate game, whose rules are set and sometimes altered by people who do not necessarily have the best interest of the feuding parties in mind. Out of court, I try to build a quieter life in which moments of introspection are no longer limited to the hours spent riding a horse or climbing a mountain. I live in Geneva but exist outside city life. I find myself getting upset by messages of compassion and the attention of colleagues and friends, however well intentioned. One day, I erase from my address book the names of dozens of lawyers and friends with whom I previously enjoyed spending time. Even a visit to the stables of Lancelot, the beautiful black stallion that I used to ride, brings little joy.

I start to watch the world around me much more closely. Some afternoons, I sit on a bench inside Geneva's train station, observing. I try to imagine why so many people would want to travel, what drives them to pace back and forth on the platform, how the panic on their faces suggests their lives depend upon catching a train. We all think that we are going places, that we are setting the pace and choosing our direction, and yet most of us seem to forget that key events in our lives are unknown to us, particularly the moment of our death. After discovering the writings of Carl Jung, the Swiss psychologist, I also come to

> I start this new chapter believing I am more solid spiritually. As light as Erhard when he climbed Everest

embrace his concept of the "shadow self" — the hidden inner personality that makes us project on to others our own desires or shortcomings.

In the summer of 2011, I take a three-week break, filling my suitcase with a strict minimum of clothing. I need room to pack the diaries I kept as a teenager as well as books that my next-door neighbour has chosen for me. I plough through Osho and Eckhart Tollé, but my favourite is *Alice in Wonderland*, which I didn't like as a child but now find impossible to put down. What is reality and what is a dream? Isn't falling asleep a little like death, since nothing guarantees we will awake? Among other readings, Alice helps me make some sense of my brief experience of imminent death and the afterlife.

After my vacation, I resume my double life in Geneva. I'm a judge for a few hours each day, trying to convince people to settle outside my courtroom, and a hermit the rest of the time, rejecting invitations and calls from friends, until eventually I stop getting them.

In the summer of 2012, I have to have more surgery on my wrist, which was badly operated on after my fall. I welcome this unexpected opportunity to scrutinise a specific part of my body, so I ask to watch the surgery, which normally occurs behind a screen. I watch, fascinated from the outside by what is happening inside, as the doctor cuts through the tissues. Afterwards, I decide I need to better understand the link between mind and body. I spend the next two years taking anatomy courses at a school where I am the only participant not studying to actually practise alternative medicine. Most of my courtroom work involves real-estate disputes, so I start enjoying the idea that I'm just a tenant inside my body, trying to keep up the maintenance but aware that my lease might expire any minute.

My introspection leads me to a world of shamans who offer the keys to unlock the spirit. Soon enough, I start to substitute the extreme sensations that I had once felt mountaineering with Erhard for those that can be gotten while playing the drums to reach a trance, taking Amazonian ayahuasca, Mexican peyote, injecting psychedelic toad's venom into my bloodstream or using different synthetic drugs. At one stage, I start a relationship with the assistant to a so-called shaman whose spiritual retreat I attend. I see in him a healer rather than just a lover, but I find instead a lost soul, immersed in drugs. I manage to leave him after several months, once I finally come to terms with the extent to which he was simply feeding my desire to play the victim.

Without fully realising it, I spend almost four years navigating a universe of eclectic New Age practices, alongside people with whom I mostly don't want to talk. With hindsight, I come to believe power, money and spiritualism form a dangerous concoction. Substances can open the mind, but they need to go hand-in-hand with the intense and difficult work of introspection.

In the summer of 2017, I fall in love with Jean-François, a friend of Erhard's since they were teenagers. They share the same enthusiasm for nature and solitude, as well as the passion for climbing, which Jean-François practises daily in a converted barn that serves both as his workshop and climbing wall. A carpenter by training, Jean-François built a house in the valley next to the one where Erhard once lived. He reignites my fascination with the mountains, even if I have lost the desire to climb the tallest. (My logbook was permanently closed after reaching 47 of the 48 Swiss peaks of more than 4,000 metres.)

But the winter after we get together, I decide to join Jean-François back-country skiing. Jean-François is more talkative than Erhard, and his words help dissipate any apprehension that I might have had when starting out at the bottom of the slope. We talk about everything, except Erhard. Jean-François tells me that he is interested in my present, not my past life.

In January 2018, we climb a nearby mountain on our skis. It is a beautiful, clear day but, halfway up, I feel a sudden urge to return to the chalet. A few minutes later, I plunge into a ditch that cuts across our slope. I immediately feel that I'm seriously injured, as I have flipped back on to one of my own skis. Jean-François tells me that I probably have broken my sternum with my own chin,

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Spectrum

How professors' children are shaping the world

Simon Kuper

World view

What do Sam Bankman-Fried, Kanye West and Volodymyr Zelenskyy have in common? They are all sons of professors. In fact, we are an epidemic. (My father taught anthropology for 50 years and has just written a new book.) Our lot now runs much of the world, from politics to tech. How did that happen? And how worried should the rest of you be?

Our cohort includes Emmanuel Macron, Benjamin Netanyahu, Justin Trudeau, Pete Buttigieg, South Korean president Yoon Suk-yeol, the Google founders Larry Page and Sergey Brin, and Bankman-Fried's arch-rival Changpeng Zhao, who created the crypto exchange Binance.

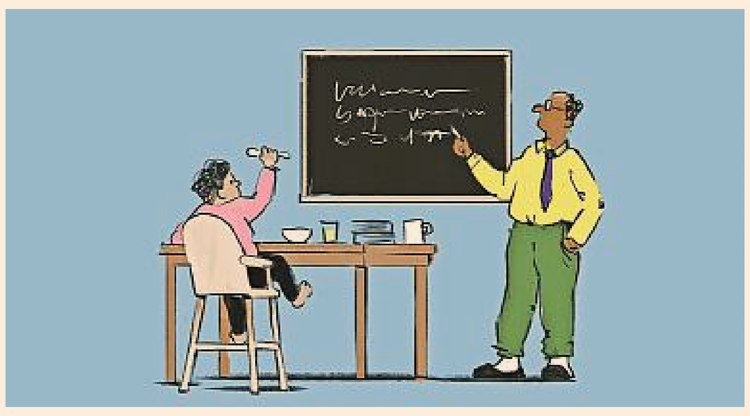
Tony Blair and Barack Obama don't quite qualify, because their academic parents never made it to professor. Blair's dad was a law lecturer and later a barrister, while Obama's anthropologist mother mostly worked outside academia, though practically her last project before dying, aged 52, was her 1,043-page PhD dissertation, "Peasant Blacksmithing in Indonesia". Powerbroking professors' daughters are rarer, other than US vice-president Kamala Harris and Britain's almost-forgotten 44-day prime minister Liz Truss.

Our pathway to power works something like this. You grow up in a house where ideas are taken seriously. Most of your education happens at the kitchen table; school is considered a mere irritation, because professors tend to regard schoolteachers as inferior versions of professors. The child, especially if male, acquires intellectual overconfidence. If even mum or dad can understand ideas, how hard can it be?

Then you have to choose a career. In our era, academia was losing its appeal. Academics' relative pay probably peaked a century ago, when German professors in the Weimar Republic were one-percenters. Our parents had offices on linoleum corridors with peeling walls and came home every evening (or sometimes lunchtime) moaning about university bureaucrats.

More fundamentally, their work seemed a waste of brainpower. Macron's neurologist dad, for instance, studies cats' sneezes. Bankman-Fried's father, a law professor at Stanford, once wrote: "I had spent my first 10 years as an academic happily writing the kind of scholarship that no one reads except other academics."

When I was young and vaguely considering academia, a friend doing a PhD showed me a paper in an historical journal titled something like, Oxen in the American Civil War. He asked, "How many people do you think will read this?" "Nine?" I guessed. "Zero," he said. No wonder Obama only briefly



Harry Haysom

taught constitutional law at the University of Chicago, while Macron chucked his agreed visiting fellowship at the London School of Economics to become a minister.

The professor's son, who often grows up in a small, dull university town, yearns to impact the big world. Indoctrinated to revere ideas, we rarely try climbing corporate ladders. But we sense that the complicated ideas our parents banged on about would have more effect if translated into ordinary people's language. That's why many of us become intellectual popularisers: Malcolm Gladwell, Nate Silver, Noam Chomsky, Ken Burns and, in politics, Obama and Blair. I'll half-count David Attenborough, son of a college principal.

Netanyahu has spent his political career implementing some of his

> The professor's son, who often grows up in a small university town, yearns to impact the big world

father's ideas. The historian Benzion Netanyahu, who lived to 102, argued in his controversial magnum opus that the Spanish Inquisition hunted Jews based strictly on their race, even if they had genuinely converted to Christianity. His son, too, sees an unceasing, uncompromising threat to Jewish survival that requires Israel's hard-right turn.

But ideologically speaking, Netanyahu, Kanye and former Russian president Dmitry Medvedev are exceptions. Most professors' children absorbed the liberal ideas of our parents' academic generation. We're comfortable with the self-doubt inherent in liberalism. Think of Macron's habit of making an assertion, then instantly arguing against it: *en même temps*, at the same time . . .

The next generation of professors' kids will probably carry a different ideology. Academia has shifted leftward. Whereas liberals value discussion, leftwingers feel a duty to take sides. And professors continue to slide down the class ladder: British academic salaries dropped about a fifth from 2009 through 2019, after which pensions were slashed. Academics today are an increasingly angry lumpen-intelligentsia. The next revolution is brewing in a child's bedroom in some dingy off-campus apartment.

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Three falls in the Alps

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but that I might also have more serious damage. He rushes off to get a phone signal and call for help, while I follow his instructions to lie still. I feel scared as I try to fight off the cold. A helicopter eventually airlifts me, this time to a hospital in the city of Lausanne.

The doctors confirm my sternum is broken, as well as several ribs. More worryingly, I have broken three vertebrae, including the top one, the atlas. It is named after the Greek myth because, just as Atlas supported the globe, it supports the entire head. I am injected with morphine, which gives me sensations similar to those I experienced during past shamanic ceremonies. I have a vision of my back, the skin entirely removed, like a carcass waiting to be sliced by the butcher. The surgeons want to operate on my spinal cord immediately, which they say is necessary to ensure I don't spend the rest of my life in a wheelchair. But the surgery is risky. As a result of my anatomy classes, I've also become more sceptical of the protocols that hospital doctors follow, especially when they are too rushed.

With the support of Jean-François and another doctor who helped me recover from my previous accident, I decide to go with the alternative: a rigid corset that compresses me from neck to waist. I will have to wear it for many months, if not longer, with no guarantee the vertebrae will heal properly.

After two weeks in hospital, I'm allowed to return to Jean-François's chalet, where he becomes my permanent nurse, only taking time off to continue his carpentry work in the adjacent barn. I'm lying on a bed specially adjusted by Jean-François, who also uses his DIY skills to convert part of the ground floor into a space in which he can bathe me. He takes care of me without any sign of frustration. He tells me about the Hawaiian concept of *Ho'oponopono*, that our souls jointly created this accident so that we could grow enough to surmount it. Everything that happens on earth, that people like to define as good or evil, is in fact following the path dictated by our souls, he tells me.

Once more, I'm forced to take sick leave and told that I won't be able to return to work for at least eight months. But I'm living with a man who is willing to take on any task, including that of a physical therapist. From the onset, he promises me that my body will re-emerge stronger than before the accident. We also adopt two kittens, Snow and Luna.

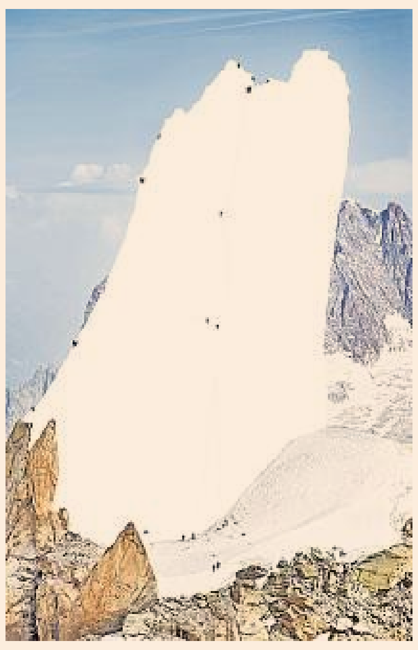
My corset and strong headaches make it too uncomfortable for me to read, so I switch to listening to audiobooks, most of which have to do with the mind and the body. I try to learn more from Jung, Jiddu Krishnamurti, Alan Watts, Frédéric Lenoir and Joe Dispenza, among others. I completely stop listening to the news and lose interest in any of the stories that make the headlines.

In the summer of 2018, I return to work part-time, once again much quicker than anticipated. I'm not fully healed, but I've learnt to treat my corset as if it were armour and ignore some of the tensions and unpleasant comments that welcome me back in to the courtroom. I'm almost enjoying having to keep my head completely still; I only focus on the person I am facing and who is talking to me, ignoring all the other things that could normally distract me.

Eventually, I recover and no longer have to wear the corset. I keep it at home and occasionally put it on to remind myself how miraculous it is that my body can stand straight. But my year doesn't end peacefully. We must bury one of our cats, Luna, killed by a car on the road that crosses our village. "She decided to leave us," Jean-François tells me. "She's leading the way," I reply.

I start 2019 by using my independence as a judge to set up a new work schedule that allows me to only spend three days a week in Geneva. While in the city, I also bunch together my court hearings in order to have time to visit my dad, whose health is declining. I spend the rest of the week with Jean-François in his chalet, where I write my court rulings with a view of the small mountain outside.

For decades, Jean-François has begun his days by climbing this mountain — on back-country skis in winter, jogging in summer — and paragliding back down in time for breakfast. This morning routine has kept him not only incredibly fit but also very close to the nature that he loves as much as he hates city life. One morning in February, when I'm working in Geneva, I try to call Jean-François to wish him a wonderful day. He doesn't



> When the rescue helicopter lands, I rush to embrace Jean-François, kiss his cold face, until I'm forced to let go

pick up the phone. Anxious, I send him a text message, awkwardly joking that I hope he has enjoyed "flying to the song of the eagles".

At lunchtime, I visit my dad in the hospital where he has undergone a foot amputation. He seems to be losing his desire to fight his illness and, by the time I reach the car park, I am in distress, worried about my partner and exasperated by my father. In the early afternoon, I get a call from Jean-François's son, who lives nearby. He tells me there is no sign of his father and that he's calling emergency services. I drive two hours from Geneva back to the mountains, struggling to keep my eyes on the road. My reason wants to argue all will be fine, but my heart knows this is not the case. Overnight, a search party finds his body buried under a small avalanche. Jean-François died on the mountain that he knew like the back of his hand.

When the rescue helicopter lands, I rush to embrace Jean-François and kiss his cold face, until the emergency team forces me to let go. It's the second time I'm kissing my dead partner. Eight years earlier, I had insisted that I should be taken, by ambulance, from my hospital bed to the cemetery to attend Erhard's funeral.

Another new chapter. Soon enough, my fears about my dad are confirmed, and I learn that he is having another amputation. Despite repeated promises from the doctors that he will soon return home, he dies in the hospital six months later.

A month after burying Jean-François, I decide that I must quit my job as a judge. In the upper echelons of the Swiss legal system, it is almost unheard of for a 46-year-old judge to retire under normal circumstances. I was considered young when I was appointed 11 years ago; now I want to become Geneva's youngest retired judge.

My brother tries to convince me that I should not abandon one of the most secure and prestigious jobs in Switzerland, that I should instead ask for an unpaid leave of absence. But I want to turn the page fully, with zero temptation to ever return to a profession in which the letter of the law seems to me to have become more important than the spirit and where status is placed above feeling. I find it ridiculous to be greeted by people with phrases like "Your Honour".

My last day as a judge is July 30 2019, which is also my birthday, and leaving feels like the perfect gift. I look back on a job that was never a vocation, rather something I chose because my father once told me that it was both difficult and rewarding to study law, which I took up as a personal challenge. Difficult and rewarding, but low risk. Luckily, I have enough savings to allow me to lead a frugal life. I could also tap into some of my pension money before reaching the official retirement age, should I ever actually reach it.

I start this new chapter believing that I am more solid spiritually than I was in 2011, when Erhard died. I now feel as light as he was when he climbed Everest, with only his water bottle and chocolate. I have no professional duties, no social obligations, and I can devote all my time to trying to understand myself better.

After reading the *Yoga Sutras of Patañjali*, I add more yoga to my early morning routine, which is a blend of meditation, long bouts of deep breathing and some other physical movement. I also return to an earlier interest in massage and study a Hawaiian technique, *Lomi Lomi*, that I start to practise on my very few visitors, mostly my mother and brother. I now rent a chalet, at an altitude of 1,000 metres, just below a ski resort in the Valais region of Switzerland. The chalet itself is on the outskirts of a village, and its main assets are its windows and terrace, from where I enjoy what I consider to be the best TV show in the world. I try to rise with the sun and watch it set every day, as it colours the snowy Alpine peaks pink, deep orange and, finally, dark blue.

Snow, my cat, is also my last link with Jean-François, since we raised him together. But in May this year, on Ascension Day, Snow doesn't return from one of his hunting trips in the surrounding fields. I spend hours walking up and down the road that runs past our home, until I find his corpse in a ditch. I surmise he must have managed to crawl there after being hit by a car. My sorrow is immense, but soon eclipsed by the gratitude that I feel for having shared an intense part of my life with Snow, whose presence became as important for me as that of any human being. Every being comes, every being goes. I now always try to think of Snow's departure as the completion of his main mission on earth, which was to help me overcome the loss of Jean-François. As Jung put it, "Life is a luminous pause between two mysteries that are yet one."

As told to Xenia's brother, Raphael Minder, who is the FT's central Europe correspondent

My answers to four mind-bending 'What Ifs'

Tim Harford

Undercover economist

One of my favourite books of the year was Randall Munroe's *What If? 2*, which, like its predecessor, offers serious scientific answers to absurd hypothetical questions. For example, "What would happen if the solar system was filled with soup out to Jupiter?" The short answer is nothing good. Munroe's extensively researched answer begins simply with "Please make sure everyone is safely out of the Solar System before you fill it with soup." Or, what would happen if you installed a large iron cube cooled to absolute zero in your living room? (If you can avoid the risk that liquid oxygen collects like dew on the cube's surface, then sets your house on fire, you'll be fine. Just don't lick the cube.)

Inspired, I took to Twitter to ask for people's absurd hypothetical questions about the economy, to which I might attempt serious answers. This column is too short — and this columnist insufficiently gifted — to do justice to Munroe's books. Yet I must try; those absurd hypothetical questions aren't going to answer themselves.

What does the world look like if all monetary transactions are now conducted with only penny coins? — *Stuart Langridge*
The obvious problem is that your purse would become rather heavy. The British penny weighs 3.56 grammes; put another way, £2.81 weighs a kilogramme. Most products would weigh substantially less than the coins required to buy them. A supermarket shop costing £100 will require 35.6kg of pennies, so make sure you park next to the shopping trolleys.

All this would be inconvenient. People might start to figure out workarounds. What might they do?

History offers a clue. About a thousand years ago, the citizens of Sichuan, China, were ordered to use coins made of iron. (Sichuan was a frontier province, and China's rulers didn't want gold and silver circulating around Sichuan, possibly leaking into foreign lands.) Sichuan's citizens immediately faced the penny problem, namely that hardly anything weighed more than the iron coins you would need to lug around to buy it.

Rather than pushing around cart-loads of iron coins, merchants would write IOUs, promising to settle their bills later when it was more convenient for everyone. Then — this step is obvious in hindsight — people started paying for things by passing around the IOUs. If the widely respected Mr Zhou bought something from my shop and wrote me an IOU, then when I went to your shop later, I could write you an IOU in turn. But you might prefer it if I gave you Mr Zhou's IOU instead. After all, we both know that Mr Zhou always pays his debts.

Now you and I, with Mr Zhou, have created a kind of paper money. It's a promise to repay that has a marketable value of its own that can be passed from person to person without being redeemed in tiresome iron coins. I suspect that if we were forced to adopt Stuart's "pay in penny coins" system, we would invent paper or digital alternatives just as the Sichuanese did, and be back where we started.

What if we had not a minimum wage but a maximum wage?
— *Rachel Wrangham*
The perennial concern with a minimum wage is that it might destroy jobs. Oddly, a maximum wage could have the same effect. In both cases, workers and employers need to negotiate a sweet spot: a wage that is high enough to attract workers, but low enough to be profitable for employers. A problem with both minimum and maximum wages is that the sweet spot may be illegal — in which case the job won't exist. Either it is unprofitable for employers, or unattractive for the workers. Oops.

Guillem Casasús

Wage rules also change the power dynamic in workplaces. Minimum wages put more bargaining power into the hands of workers. A legal wage maximum would put more bargaining power into the hands of employers. It might well increase corporate profits while reducing superstar salaries.

I suspect that highly paid workers would try to find loopholes in the form of self-employment, for example. Yet self-employment has been a loophole for avoiding the minimum wage too.

What would happen if tax wasn't a thing? — *John Cronin*
The immediate consequence would be that we'd have to find another way to pay for (or go without) the army, the police, roads, the National Health Service, schools, state pensions and repaying public debt. For a hint of how this might look, pick up a recent British newspaper.

Of course it would be more intense than that. UK government debt would be repudiated, pensioners would go back to work or beg for alms, and healthcare and schooling would be paid for in the same way as food and housing — out of people's own pockets.

Many people might be surprised at how little difference abolishing tax made to their lives. What they saved in taxes, they'd pay instead on visits to the doctor or school fees. But a huge amount of redistribution is quietly conducted through public spending, so the country would be full of people who couldn't afford schooling, road pricing, healthcare or pensions.

And some things just don't lend themselves to user fees. The UK's Meteorological Office could maybe pay for public weather forecasts through voluntary contributions, but it's unclear that you could pay for the army, navy and air force simply by having a whip-round.

A radical alternative is to pay for public spending by printing money. This would cause inflation, and eat away at everyone's spending power. At a first approximation, it should cost citizens about as much as their taxes would have done. The burden would fall differently, though. People with large cash holdings or nominally fixed incomes would lose most. Those who held tangible assets or were easily able to hold their wealth in foreign currencies would lose the least.

Trying to pay for all existing public spending by printing money would quickly be disastrous. In the UK, the government is responsible for about half of all spending in the economy, so printing money would soon cause chaotic hyperinflation. But if public spending were reduced dramatically, and health, education and other services were provided on a fee-for-service basis, then perhaps the printing presses could solve that nagging question of how to pay for the army.

In summary: make sure everyone is safely out of the country before you abolish all taxation.

What would happen if everyone in Coventry was given £1mn on condition that they didn't leave Coventry? — *Neil Pattinson*
Coventry would become the Qatar of the West Midlands. With all its residents suddenly becoming millionaires, it would be hard to persuade anyone to do unpleasant work. However unpleasant work would still need to be done. That would mean persuading a new class of non-resident workers to commute into the city to do it — an arrangement that is likely to prove inefficient and expensive. Within the city's boundaries, it would be absurd to try to produce anything other than Michelin-starred restaurant meals or luxury spa treatments for Coventry's original residents. And the whole thing would end in tears if the money ran out. On the upside, Coventry would host a fantastic World Cup.

If you have other absurd hypothetical questions about the economy to ask me, please send them to tim.harford@ft.com. Meanwhile I can only apologise to Randall Munroe.

Tim Harford's new book is 'How to Make the World Add Up'

Spectrum

The case of the missing watches

A hunt for a special gift for his wife took *Jeff Maysh* on an accidental journey into the grey market for Rolexes

In April, I decided to buy my wife a Rolex. Her 33rd birthday was approaching, and I needed a gift befitting a woman who in the past two years had not only changed career, but given birth in a pandemic-ravaged hospital and raised a child during violent protests near our home in Los Angeles. For months, it felt like the Rolex Oyster Perpetual had been following us. Its handsome blue face stared out from our favourite glossy magazines. Television commercials for the same model interrupted the Australian Open. And on Instagram, #perpetual was unavoidable. On the day we left the city for a new life in the suburbs, the Oyster Perpetual, a stainless steel miracle of horology, watched us drive past from a freeway billboard.

It seemed like Rolex had spent millions marketing this $5,800 watch directly to us. So I popped down to my nearest authorised dealer to pick one up.

At Ben Bridge Jeweler in a mall in Thousand Oaks, California, I found only empty cabinets and an apologetic salesperson. They didn't have any Oyster Perpetuals, he said with a shrug. They didn't have any Rolex watches at all. The store looked like a gang of ram raiders had just left and, when I found the same thing at other boutiques, something didn't feel right. I scrolled through Rolex's Instagram account and found the comments section festering in conspiracy. "Rolex produces a million watches a year," wrote one follower. "Then grey market dealers buy them all up and sell them at a premium." What was this grey market, I wondered. And could I buy my wife a watch there before her birthday in May?

The inner workings of the Rolex company are cloaked in mystery, much like the complicated movements of its watches, which are invisible to the wearer. Rolex timepieces generate more than $8.6bn in sales annually, but the brand belongs to the Wilsdorf Foundation, which funnels its profits to worthy causes and the arts. The foundation is named after Hans Wilsdorf, an orphan who founded Rolex in 1905 and established the foundation 40 years later. For decades the Rolex watch has remained the ultimate status symbol — one in plentiful supply. In the 1960s, Fidel Castro wore two at once. Those days are over.

'I could make a lot of money. I get bonuses if the store does well. I am a single parent. I need every dime'

"The scarcity of our products is not a strategy on our part," Rolex says. "The reality is that our current production can simply not meet existing demand, at least not without reducing the quality of our watches — something we refuse to do . . . Rolex watches are sold exclusively by official retailers, and they independently manage the allocation of their watches to their customers." Yet, if production numbers estimated by Morgan Stanley are correct, Rolex made an estimated 1.05mn watches in 2021. Where were they?

"I don't think it's a supply chain issue," says Eric Wind, a vintage watch dealer and widely respected Rolex authority. He says the current demand for the Swiss company's watches is unprecedented. "There are watches that are selling for 10 times retail on the secondary market . . . That's part of why it's so hard for you to get that watch for your wife," he tells me. "Because if the dealer can get a few thousand dollars in cash on the side, versus you walking in willing to pay retail . . . some will be motivated to take the cash." This temptation has increased as the market value of Rolex watches ballooned.

Back in 2015, I purchased my own Rolex, a diver's model called a Submariner, to commemorate a work-related windfall. I visited a vintage watch store in West Hollywood called Wanna Buy a Watch, where I nervously counted $5,500 in cash on to the counter. It was, amusingly, the exact amount of money I had to my name when I arrived in America from England, five years earlier. The watch weighed heavily on my wrist and, as a security guard held open the door, he said: "Welcome to the club." I felt about 8ft tall.

By the time I got around to insuring the watch in 2017, estimators valued it at $6,295. By 2021, Submariners were changing hands for $15,000. And by the time I began shopping for a watch for my wife Natalie, I knew I would be giving her something that would quietly appreciate in value with every tick. On internet watch forums, I read a lot about dealers using Rolex watches to offer customers quid pro quo deals. Spend a few hundred thousand dollars on jewellery and, only then, would you be offered a coveted Rolex. "It's not technically illegal," says Ariel Adams, a lawyer who publishes the watch review site ablogtowatch.com. But it's infuriating watch-buyers around the world.

Brian DeSantos, a 41-year-old creative director in Los Angeles, recounted on Reddit a similar experience at his local Rolex store. The dealer "just straight up told me: 'Steel sport watches are reward watches . . . there's no way you'll ever be able to buy one just by shopping for one.'" DeSantos was left fuming. "I'm supposed to be able to access this. I'm rich," he tells me on the telephone. "I'm willing to give you an insane amount of money for this silly thing you offer. Why won't you let me?"

I wondered if my local Rolex dealer was secretly sitting on a cache of watches, somewhere out back, behind the empty cabinets. Was he waiting for a wealthy individual to arrive jangling the keys to his Ferrari? Then, I found a lawsuit bubbling in the Midwest that seemed to offer an explanation. In Cook County, Illinois, nicknamed "Crook County" because it's so mired in federal corruption, three former salespeople at a Rolex authorised dealer had blown the whistle on what they alleged was a racketeering scheme involving timepieces. Legal documents offered a glimpse into how Rolex watches and other luxury watch brands might be trafficked from authorised dealers on to the grey market.

Photography by Sophie Gladstone

Olga Nelson had a feeling there was something fishy going on at the Old Orchard branch of CD Peacock, a chain jewellery store at a Westfield mall in Skokie, 13 miles north-west of Chicago. Nelson had worked for two years as a custom designer, manager and Rolex salesperson for CD Peacock, believed to be the oldest registered business still operating in Illinois. (When CD Peacock attended the World's Fair in Chicago in 1893, it had been selling jewellery for 56 years.) Just before the holiday sales rush in 2018, the store hired a new sales assistant, a Chinese student named Yingxue "Ying" Duan.

"She was hired with virtually no experience," Nelson tells me over Zoom. "I was told that I was to manage her." Small and slender, Duan arrived each day at the wheel of a Porsche and wafted around the "Rolex area" of the store, a glass sanctuary decorated in the brand's signature green. Like all new employees, Duan was taught that the store's agreement with Rolex states that it must only sell its watches in person to customers, never to third parties, and that the salesperson must carefully record the buyer's ID on its warranty cards.

Nelson saw Duan selling Rolex watches to strange people who breezed into the store, including her boyfriend, according to a civil complaint filed in March 2022. "We witnessed him come in with a lunch bag," Nelson tells me. They took various high-ticket Rolex watches into a back office, Nelson says in the complaint, and when she peered through the window she saw them counting piles of cash. Almost overnight, Rolex watches started flying out of the store, and Duan became its number one Rolex salesperson. "It's unheard of for somebody [so new to sales] to pull the kind of numbers that she started pulling," Nelson says. Suzana Krajisnik, a sales assistant who had been hired at the same time as Duan, also reported her colleague's behaviour to her bosses. Duan, who included "leadership" and "management" on her list of skills, didn't mix well with staff.

Soon, Duan started holding closed-door meetings with the store's senior management who, according to the lawsuit announced a jaw-dropping, one-time sales target of $10mn to the sales team. After that, the suit alleges Duan started buying watches using her own credit card, breaking the rules. By now, almost all Rolex stock was sold through Duan, who spent her breaks glued to her phone. Nelson says she surreptitiously observed Duan selling watches directly to Asia's grey market, on Facebook. "I found myself in a very tough predicament," Nelson says. "I could make a lot of money [because] I get bonuses off the team and Ying if the store does well . . . I am a single parent. I need every dime I make to take care of my kids."

Two civil complaints filed in 2021 and 2022 opened up the case of this alleged grey-market scheme and allowed everyone to peek at the machinations. According to allegations in Krajisnik's 2021 complaint, Duan made special orders to Rolex and received watches with a retail value of about $40,000 each. She then purchased the watches using her own credit card and supplied Rolex with a fake buyer's name, "Phoebe W". Finally, she hawked the watches online to foreign buyers at a massive mark-up. (Duan did not respond to interview requests.)

"I work at an authorised Rolex dealer," Duan told one customer, in social media messages saved by Nelson and included in the latest legal complaint, filed in March 2022. "Whatever you are doing in Taiwan, keep it low, and don't make it difficult." When Nelson scrolled through Duan's Facebook account, she saved photographs of Duan's contacts posing with bricks of cash while wearing solid gold Rolex watches. When I saw the images that Nelson submitted as exhibits in support of the complaint, I began to understand one possible reason it was so hard to find a watch for my wife. But who were these mystery buyers, and what was the source of their money?

"This crypto thing has definitely got something to do with it," says Rob Corder, who has reported on Rolex for a decade for the magazine WatchPro. When the newly rich want a brand-new Rolex, they want it now. That puts authorised dealers and their staff in a tricky situation, Corder explains, because the moment a watch leaves the store in the hands of a third-party "flipper", its value triples or quadruples. "Flippers are constantly grooming salespeople with promises of splitting the profit of over-retail deals," Corder explains on his blog, adding that Rolex takes a tough line on any dealer who breaks the rules.

But that requires getting caught. "There's a lot of grey market activity . . . in New York," says Wind, the Rolex expert. "I've seen dealers with, literally, buckets full of brand-new [Rolexes] . . . all in plastic Ziploc bags." In my quest for my wife's birthday present, I found several online dealers offering the Oyster Perpetual for $9,250, 60 per cent more than its retail value and way out of my budget. (There's an unwritten rule that one's watch should not exceed the value of one's car, and my wife and I drive a modest second-hand BMW.)

It was February 2019, back in "Crook County", and CD Peacock's Rolex manager, Giuseppe "Joe" Di Lorenzo, had also noticed the store's Rolex sales figures skyrocketing. Di Lorenzo, a heavyset Italian-American with a "Dese, dem, dose" Chicago accent and a streak of grey in his hair, says in the March complaint that he confronted the store's director, Dyol Hill. He said he had found forged signatures on credit card receipts. Di Lorenzo alleges that in February or March 2019, Hill offered him a cut of Duan's commissions to keep quiet. When he refused, Di Lorenzo alleges that Hill threatened him, saying: "[I will] not let no one derail my retirement plans."

By now, things were out of control. Duan would, according to the first legal complaint, "intentionally fail to remove the Rolex product's protective sticker so it could be resold as 'brand-new'". Di Lorenzo claims that instead of assigning Rolex warranty cards to genuine customers, Duan made them out to fake names, like basketball star LeBron James. Di Lorenzo felt conflicted. He was his family's breadwinner and his wife was pregnant. He needed his job and decided to stick it out.

Meanwhile, Duan was listing Rolex watches for sale on various social media pages, including Facebook, Instagram and WeChat, according to the complaints. Sales data quoted in the first lawsuit filed by Krajisnik shows that, between March and April 2019, Duan purchased eight Rolex watches, worth between $14,050 and $49,670, using her own credit card and, at times, with "quantities of cash brought to [CD Peacock] in literal sacks of money by her friends and buyers". Nelson says she saw Duan shipping empty Rolex boxes out of state to avoid paying sales taxes, and that some of the watches ended up abroad. It was no wonder there were few left for rubes like me who walked in off the street.

Soon, other CD Peacock sales people were denied access to Rolex products and had their work hours cut, according to the March complaint. This caused a mutiny. Screaming matches broke out and Duan was often seen sobbing out back. Nelson was startled. If the store lost its licence to sell Rolex products, she would probably lose her job and along with it her family's health insurance. "It was extremely stressful," Nelson says, tears forming in her eyes. She considered telling the store's highly respected owner, Seymour Holtzman, or the CEO, Robert Baumgardner.

The moment a watch leaves the store in the hands of a third-party 'flipper', its value triples or quadruples

Then, Nelson says she discovered a four-page handwritten document detailing a meeting involving Baumgardner, Duan, Hill and a fourth investor plotting to purchase CD Peacock. According to the document submitted as an exhibit in the latest legal complaint, Duan would become a partner with 51 per cent of a shareholder equity worth nearly $18mn — a staggering amount for a student. Rumours swirled among the store's staff that she was connected to the Chinese president, though there is no evidence of it. Then, in June 2019, according to the court filing, Nelson took a deep breath and decided to tell CD Peacock's head accountant about Duan's scheme. Nelson was fired.

In December 2019, Krajisnik was fired, too. Around that time, in a closed-door meeting, Di Lorenzo told a superior he was "worried that something illegal was going on" relating to Duan. But her activity continued, unabated, into January 2020. That was when they fired Di Lorenzo, not long after his wife had given birth.

In the March complaint, it is alleged that CD Peacock claimed that Di Lorenzo had engaged in possible fraudulent behaviour by selling a Rolex to a "Serbian truck driver" with a soon-to-expire driver's licence. In a letter sent to Nelson about her insubordination, made public in the court filing, Dyol Hill complained that Nelson had suggested he was "in bed" with Duan. According to the lawsuit, CD Peacock complained this had sexual connotations. (Nelson says she was using the colloquial term for collusion.) Meanwhile, Krajisnik claimed that CD Peacock fired her for having "lagging sales numbers".

In February 2021, Krajisnik filed the first lawsuit against CD Peacock's owner, Holtzman, and four employees, alleging they terminated her employment in retaliation for blowing the whistle on Duan. Jane McFetridge, counsel for CD

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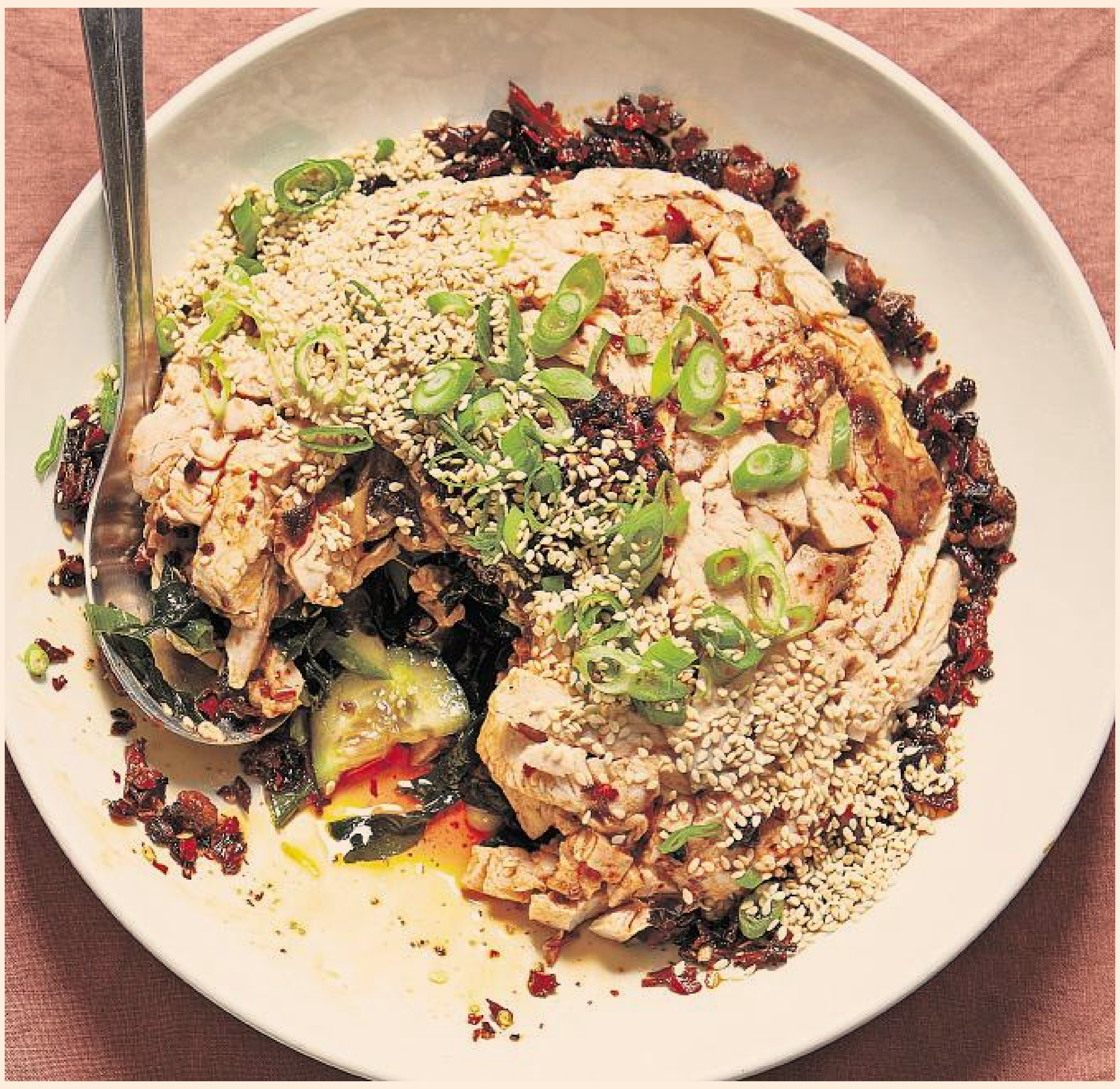
Spectrum | Food & drink


Patricia Niven

Light fantastic

Cookery | *Sarit Packer* and *Itamar Srulovich* add some zesty, punchy flavours to leftover turkey

A recipe for the tail-end of the festive season if, like us, you find yourself with a fridge full of leftover turkey and a craving for light, zesty, punchy flavours after all the brown buttery offerings of Christmas.

Inspiration comes from one of our neighbours, the inimitable Master Wei Xian. It is one of the best restaurants in London; we never fail to be impressed by the consistently dazzling food. It is famed for its hand-pulled noodles and dumplings, but our meal usually consists of three cold starters and one main; the main may change but the starters are always the same.

There's the smacked spicy cucumber, cloud ear fungus with coriander, and boneless chicken in ginger sauce. The first is an act of fine balance between the hot chilli and cool, crunchy cucumber; the second, a delicious tug of war between the earthy, slippery mushrooms and citrusy, grassy coriander; and the third . . . well, we could attempt a description, but not as gracefully as Tim Hayward would, so we'll leave it to him.

We do not claim that this is a truthful representation of Master Wei's recipe. We use what we always have in the kitchen for delicious results: seaweed is not in the original (and can be omitted) but we like what it brings to the party.

You can poach chicken for this — and you'll be well rewarded — but give this simple treatment to any leftover turkey or chicken for a new lease of life as a light, refreshing meal or an easy starter.

For the dish that inspired this, we will risk encroaching on Tim's turf again and give you the address: 13 Cosmo Place, London WC1N 3AP.

Drink with a cold, fresh Riesling, something that tingles the tongue. Try Charles Smith Kung Fu Girl for a refreshing take on the classic.

Follow Sarit and Itamar on Instagram @honeyandco

Turkey salad

Serves four

Ingredients
500g leftover cooked turkey breast (or if you want to make the salad without the leftovers, you can poach two chicken breasts in salted water instead)
10g dried seaweed for salads
3 spring onions
1 cucumber, halved, seeds removed
2 heaped tbs crispy chilli oil
2 tbs plain vegetable oil (such as sunflower or rapeseed)
1 tbs sesame oil
1 tbs fresh ginger, grated
2 tbs toasted sesame
A pinch of sea salt

Method

1. With a sharp knife slice the turkey into thick pieces, then lay the pieces down and shred them the other way, into thick batons and press into a large bowl in a dome shape to form the top outer layer.

2. Soak the seaweed in boiling water for 5 minutes then strain and place in the turkey dome. Thinly slice the spring onions and add those on top of the seaweed.

3. Cut the seeded cucumber into half moons and fill the bowl with them.

4. Place a deep-rimmed plate or shallow pasta bowl on the filled bowl and press down.

5. Mix all the oils together, then add the grated fresh ginger and stir well.

6. Flip the bowl and plate so that the turkey dome comes out on to the bottom plate. Pour the oil mixture all around the rim, sprinkle the roasted sesame and salt over the top and dig in.

The haves and have-nots of Bordeaux's widening gap

Jancis Robinson

Wine

I wonder how many bottles of red bordeaux will grace Christmas dinner tables this weekend? I generally recommend a softer style of wine, one based on Pinot Noir perhaps, to go with turkey and its sweetish accompaniments.

The chewier, drier style of red bordeaux can, however, go well with something more savoury such as roast beef or goose.

But what is happening to red bordeaux? Most agree that its quality has never been better. At the top end of Bordeaux's carefully carved hierarchy, the so-called classed growths, château owners have made so much money that they can afford to invest in every last fine-tuning operation, such as an optical sorter that rejects any grapes with the slightest imperfection. Others blend only the very best vats into the main wine — the *grand vin* — each year.

At the bottom end of the hierarchy, the warming climate means that even if the property is located in one of Bordeaux's less propitious areas, the grapes still ripen fully, making lean, mean wines a thing of the past.

But as in so many societies today, the gap between top and bottom has been widening. This has been so disastrous for those producing wine at the bottom end that they want the French government to pay them to uproot up to 15,000 hectares of the least profitable of Bordeaux's 110,000 hectares of vines.

It's not just that the price of Bordeaux's most basic wine has been falling — so have land prices. A hectare of vineyard with a famous name attached, such as Pauillac, has shot up to €2.8mn, according to the (generally conservative) estimates of France's agricultural land agent Safer. A few kilometres away in the much less glamorous appellation of Médoc, the price of a hectare has actually fallen to just €40,000.

Robert Joseph, a British wine trade commentator, has argued that the blame for this lies with the producers at the bottom end who have failed to build brands, unlike their counterparts with names as famous as Lafite, Mouton, Lynch-Bages and Montrose.

In a feisty article in the trade publication Meininger's Wine Business International, he calls out the malcontents at the bottom of the ladder: "The people they should be angry with are themselves and the *négociants* [merchants], for failing to show the skill their Champagne counterparts have in creating the brand value their wines deserve," he writes. "If Bordeaux had a few big brands doing the job Moët & Chandon and Veuve Clicquot et al have done for their region, Bordeaux as a whole would be in a far better state financially than it is today."

Global wine marketplace Liv-ex compiles an annual list of the most powerful brands in fine wine with the trade publication The Drinks Business. This year, for the first time, there are no Bordeaux wines in the top 10, and the number in the top 100 has fallen from 53 in 2017 to 25 in 2022. (Burgundy has been the big beneficiary, climbing from 24 to 39 over the same period.)

Bud Cuchet co-founded the London fine wine traders Fine + Rare. He couldn't but notice his customers' falling interest in Bordeaux and the contrast between producers in, say, California, where direct relationships with consumers are so important. Bordeaux producers, meanwhile, have basically only one customer, the

Leon Edler

Bordeaux Place, a tight-knit network of wholesale merchants who do all the selling for them.

So when he left Fine + Rare in 2017, he set up a company designed to create personal links between Bordeaux château owners and influencers, consumers and restaurant buyers. He went to Bordeaux to present the results of his initial research, which showed how poorly Bordeaux is represented on important British restaurant wine lists — but such was the indifference of the Bordelais that he gave up.

The Bordeaux classed growths came to London en masse in November to present their 2020s now that they are in bottle. Most of them are very well made, even if more expensive than the bargain 2019 vintage offered *en primeur* during lockdown. Earlier this month in London I bumped into Olivier Bernard of Domaine de Chevalier, one of the stars of this 2020 tasting. "It's vital that you write about the 2020s now that they are ready to deliver," he urged, eyes ablaze.

I must say my inbox has never before been so overwhelmed by Bordeaux producers anxious to have me taste their 2020s. I might be accused of "Bordeaux bashing", but I get the sense that the 2020 vintage — the most recent to go into bottle as opposed to being offered *en primeur* before that stage — is proving more difficult than usual to sell.

Twice recently in London I've had the welcome chance to compare top red Bordeaux blind with its counterparts — Cabernets, often blended with other Bordeaux grapes — from elsewhere and it has been instructive. The first comparative tasting was organised by the Napa Valley Vintners. It consisted of 17 wines, mainly mature Napa Cabs from vintages 2005 to 2010, but the organisers threw in three lauded red bordeaux — Châteaux Calon Ségur 2006, Léoville Barton 2008 and Pichon Lalande 2010 — as well as top wines from Tuscany and Chile. I enjoyed the Bordeaux trio, but my favourite wines were Long Meadow Ranch 2009 Napa and Ornellaia 2006 Bolgheri.

The second Bordeaux blend tasting was an abbreviated London version of a big annual blind-tasting of top Cabernet blends from around the world held at the Margaret River winery Cape Mentelle.

The wines were of a consistently high standard, and this time my favourite wines were the two Napa wines, Spottswoode 2017 and Château Montelena, The Montelena 2017 together with Château Pichon Lalande 2017. We were urged by the hosts not to try to identify the wines — "just enjoy them in this celebration of Cabernet" — but of course it was difficult to resist the urge. (And, whereas the Napa blind tasting in London took place in the early evening and I had already participated in two big tastings that day, the Cape Mentelle event was in early morning when our senses are meant to be at their keenest.)

I was pretty accurate in my guesses but took the gorgeous Spottswoode from California, renowned for its subtlety, for "a glamorous bordeaux?" and thought the Pichon Lalande could have been the Léoville Barton. But an examination of retail prices of all these wines makes Bordeaux classed growths look quite good value relative to their most successful challengers. Bordeaux may not be fashionable, but it should be of serious interest to bargain hunters.

To read Jancis's selection of bordeaux recommendations, find this column and previous columns online at ft.com/jancis-robinson

Stockists at wine-searcher.com

Hunt for the perfect Rolex

Continued from page 17

Peacock, called the complaint "a corporate shakedown" in an interview with WatchPro, adding that Krajisnik's demands were "divorced from reality". Then, in April, Krajisnik voluntarily dismissed the case from federal court. On March 23 2022, she teamed up with Nelson and Di Lorenzo to file the second, joint complaint in a state court, alleging that CD Peacock had violated the Illinois Whistleblower Act by firing them.

CD Peacock has called this "a classic example of forum shopping", in which litigants seek a court that favours their case. In a motion to dismiss the case, the jeweller argued that the former staff members have not proved that they were "asked to engage in an unlawful activity but then refused". It added that the lawsuit was designed to "harass" the jeweller and to "damage their business relationships". The lawsuit alleges that CD Peacock has conducted "racketeering activity", an accusation that echoed around the watch-collecting universe.

In an email to the Financial Times, a spokesperson for CD Peacock describes Nelson, Di Lorenzo and Krajisnik as "three former disgruntled employees who were terminated for cause". The jeweller "categorically denies the allegations" and adds: "CD Peacock would never engage in behaviour of this nature as it would risk relationships and a business model it has worked years to establish and foster." Yet the Old Orchard mall branch is no longer described on CD Peacock's website as an "authorised Rolex dealer". Rolex would not comment on this matter, but pointed to its official online store locator, where the Old Orchard mall branch is not listed either, unlike CD Peacock's two other Chicago-area stores.

Despite a failed attempt by CD Peacock to silence the plaintiffs by seeking

> Stores had 'wanted' posters in their windows, featuring the faces of Rolex watches instead of missing folks

sanctions from a judge, the lawsuit is slowly winding its way through the courts. CD Peacock has claimed that the information in the complaint breaches its confidentiality agreements, and that by litigating, the former employees have "thumbed their noses at the court". Meanwhile, lawyers who attempted to serve papers to Duan believe she has fled the country.

"Rolex does not comment on any legal proceedings," the watchmaker says. "However, please know that we obviously disapprove of and oppose any illegal and dishonest business practices." There is no suggestion that Rolex was involved in the alleged scheme, but it has indirectly benefited from the grey market that has tripled the value of its product and raised demand to a fever pitch By the end of April, Los Angeles was in the grip of a luxury watch crime wave. A man at a shopping centre near my old house was pistol-whipped by a robber who demanded his $30,000 Rolex. I began to worry if it was even safe to wear one.

As Natalie's birthday approached, we spent our weekends driving around Southern California visiting watch dealers. Some stores had photocopied "wanted" posters in their windows, featuring the faces of Rolex watches instead

of missing folks. In Santa Barbara we found an unauthorised dealer with a meagre range of vintage Rolexes. Natalie tried on a Rolex Air-King, a watch released in 1945 and briefly discontinued in 2014. It is a model GQ has described as "not exactly beloved by watch enthusiasts", but it was a men's size and looked surprisingly great on her wrist. Natalie said she could eventually hand it down to our son. The tag read $8,000. It was too much, I said. The salesperson pointed at my wrist and asked if I would consider selling my Submariner.

"Rolex stopped being a retail brand last year and shows no sign of returning any time soon," Corder proclaimed on WatchPro in February. "The reality today is that members of the public cannot simply walk into a shop and walk out with a Rolex . . . damage is most certainly being done."

The damage could be long term. Brehnen Knight, who founded a marketing agency called Engage Youth, says that Gen Z will not simply inherit the notion of Rolex as a status symbol. Rolex doesn't market to teens, but when Gen Z age-out of buying Casio G-Shock watches, Knight says there's a risk they won't be interested in buying a Rolex at all. "They certainly wouldn't want to develop any sort of long-term relationship with a dealer or distributor in order to access a Rolex," he says.

A sudden crypto crash this year poured cold water over the hot secondary watch market, and the flippers and speculators no longer clamoured for Rolex. This came as a relief for CD Peacock's Steven Holtzman, who took over the running of the company from his father, Seymour, last year. He told The New York Times: "We're finding we have less clients coming in looking for opportunistic situations. It's a much better situation for us." Undeterred by the market, CD Peacock is forging ahead with the construction of a $20mn-plus flagship store in suburban Chicago, which will reportedly house a two-level Rolex boutique.

By failing to control the grey market, Rolex risks driving customers, like me, into a dark secondary market where they risk buying a lemon or, worse, a fake. It's now easier to buy a counterfeit Rolex online than it is to try to romance an authorised dealer. According to a study conducted by the EU Intellectual Property Office, more young people are OK with buying counterfeit products, with 37 per cent of young customers admitting to buying a fake on purpose. "I think a lot of Rolexes on the secondary market are in fact totally fake," Wind tells me.

Worried about getting cheated, I returned to Wanna Buy a Watch, where I bought my vintage Rolex. The store has enjoyed a strong reputation since the early 1980s, and inside I found a vintage Air-King, like the one my wife had tried on in Santa Barbara. It was in excellent condition, with no warranty, no box and no papers. (In Rolex parlance it was "naked".) I had discovered that the Air-King is an homage to aviators including Charles Douglas Barnard, an Englishman who used his Rolex as an onboard chronometer, and I felt a sort of connection to it. It was $4,800.

I took the risk and handed over the cash in a brown paper lunch bag (a move I learnt from the CD Peacock scandal). When Natalie opened her gift in front of friends and family, I was horrified to see that the watch had stopped. Briefly, so did my heart. I fired off a furious email to the store. "Very sorry for the disappointment and embarrassment," the owner, Ken Jacobs, wrote back. A watchmaker swiftly replaced a displaced jewel, and soon it was happily ticking away on her wrist.

> It's now easier to buy a counterfeit Rolex online than it is to try to romance an authorised dealer

By then, Rolex was quietly at work on a plan to offer certified pre-owned watches to customers. This month, the watchmaker announced that anyone can now purchase a second-hand Rolex through Bucherer, the brand's official retailer, in six European countries, with a certification and a guarantee. It's a move that will quash the grey market and make birthdays easier.

Natalie said she preferred the vintage model.

It wasn't like the one on all the billboards and Instagram. It even reminded her of me, she joked: English and old. I must admit, it did look incredible and, when she put it on her wrist, I told her: "Welcome to the club."

Life&Arts
FT Weekend

SNAPSHOT

'Coulson Family' (2008) by Deana Lawson

Deana Lawson is a photographer known for intimate portrayals of black American life. In an Atlanta exhibition covering more than 50 works, her desire to challenge conventional representations of marginalised identities is brought to the fore. What appear to be busy tableaux of relatable domesticity are in fact intricately staged, Lawson's meticulousness akin to an auteur director on a film set.

The back-story to 2008's "Coulson Family" is difficult to discern, the festive scene offering a comment on household custom and cultural memory. Timeless tradition contrasts with the unreality of the sitters' surroundings. The comfort of the busily decorated tree sits awkwardly against the unfinished decoration of the wall, initiating a dialogue between the innocence of family portraiture and the nature of the real.

Alastair Bailey

Deana Lawson is at the High Museum of Art, Atlanta, to February 19

Books I plan not to write in 2023

Robert Armstrong

Fourth estate

Journalism is a fantastic profession with one or two serious drawbacks. Among the most serious of these is that people keep expecting you to write a book, which is a terrible idea for a number of reasons.

First among these: there are too many damn books as it is. As the son of a librarian, I know this for a fact. My dad, though he was too polite to mention it, almost surely spent his final years wondering when I was going to add a book of my own to the piles clogging our family home (I slightly suspect that when he decided it wasn't going to happen, and that Robert Caro was never going to deliver the final volume of his Lyndon Johnson biography, he just said to hell with it and died).

There simply isn't much of a case for spending my nights and weekends writing a book when you can simply order a used one from Amazon. I still haven't read John le Carré's *The Little Drummer Girl* or the final two books of Jane Gardam's *Old Filth* trilogy and I'm pretty sure that on my own death bed I'll regret that quite a bit more than failure to knock out the sort of book an FT journalist is expected to write.

"A chilling expose of Wall Street's dark side," writes the reviewer of my imaginary magnum opus, having read only the final chapter, and that over a couple of drinks. Will the Strand pay her a few bucks for her review copy? She lives in hope.

Financial journalists have it particularly hard, because of the wretched fact that Michael Lewis exists. So, when are you going to write your own *The Big Short*, asks one solicitous friend after another. Do basketball players' friends ask them why they don't simply have the ball go in the hoop every time, like that guy Stephen Curry? Probably.

Of course, journalists don't write books hoping anyone will read them. They do it for the money. That's the other major drawback of my profession — you work like a mule, get paid modestly, and hang around with rich people you feel intellectually superior to. In that sense it is like being a politician, but for politicians a natural solution to envy is always at hand: corruption. In the age of social media, meanwhile, the embarrassingly small amount it would cost to purchase a journalist is better spent getting a 16-year-old fashion influencer to say something nice about Exxon on TikTok.

> The point of writing a book no one will read is getting paid for giving speeches no one will ever listen to

The money in books is not from advance or royalties. Book publishers exist to make newspaper publishers look generous. The point, instead, is to go from being Robert Armstrong, journalist, to RK Armstrong, author of *The Fall of the House of Lucre: A Tale of Greed, Sex and Accounts Receivable*.

That Armstrong gives keynote addresses at industry conferences in Miami or St Louis for five thousand a pop, while the delegates chew room temperature chicken masala and wonder if a second bottle of wine will ever come (it won't). It's true: the point of writing a book no one will ever read is getting paid for giving speeches no one will ever listen to.

Here, then, is a very partial selection from the long list of books I will not write in 2023:

- *Carried Interests: A Life*. A critical but balanced biography of the private equity titan who brought much-needed financial leverage to the childcare and hospice industries. Forward by the outgoing chair of the House Banking and Finance Committee. Afterword by the Titan's second wife and her lawyer.
- *The Crypto Chronicles*. An insider's look at the rise and fall of Sam Bankman-Fried, by the journalist who said in a prescient 2019 column that lines of computer code might not be money. Featuring exclusive interviews with Bankman-Fried's Bahamian pills supplier, who always insisted on being paid in US dollars.
- *How to Save Capitalism from Itself*. A scathing critique of the Chicago school of economics, globalisation and Jeff Bezos, driven by the key insight that the upper middle-class can consume as much as it wants so long as they recycle, eat local produce and vote Democratic. The head of Norway's oil fund calls it "a timely call to action". With all the time saved by not writing any of these books, I expect 2023 will be the year I make some real headway on my novel. Happy New Year to all.

Robert Armstrong is the FT's US financial commentator. Janan Ganesh is away

The imitation game — can AI make artists redundant?

Jan Dalley

Trending

One online commentator asked for teddy bears shopping for groceries in the style of *ukiyo-e*, and seemed impressed. Another wasn't so happy; they'd ordered up an image of cats drinking soup in the style of Gustav Klimt ("The Kiss" is apparently a favourite picture). An earlier request, for a Formula One race on Mars in the style of Van Gogh, had produced something that looked like a rejected image for a home-produced cover of an album by a minor stoned-out 1970s band — but had apparently met with a reasonable amount of approval. Klimt's soup-slurping cats, however, were not hitting the spot. "It didn't look anything like 'The Kiss'," wailed the instigator.

Now why, I wonder, could that be? The Generative Artificial Intelligence (GAI) facility Dall-E-2, which generates images according to a few written words of description, should surely have been able to deliver the goods. Cats, soup, Klimt — where's the problem?

Ever since I heard about Dall-E in its first incarnation a while ago, I knew I couldn't avoid it altogether for long. It has, after all, pretty much stolen my name. All that's missing is a "Y".

Now Dall-E-2 is with us and, according to devotees, much improved. More detailed, more nuanced, more responsive. I'll take their word for it. What is certain is that it has sent ripples, if not shockwaves, through a community of creative people: does it challenge their reason for being and our notions of what art should be?

There's no doubt that it's fun to play with. The wilder shores of Formula One, soup, Mars, Van Gogh and teddies are easy to explore — and even if the results are usually an assault on the eyeballs, it's quite entertaining to spot the elements drawn from original works that artificial intelligence has absorbed and latched on to. Say Van Gogh, and you get a piercingly deep blue night sky studded with cartoony stars, as per the artist's "Café Terrace at Night"; ask for Klimt and you do get a simulation of his colour palette: rusts and blacks, that searing yellow.

All that this tells us is what we know about AI, as opposed to NI (intelligence of the natural sort) — it can tell us only what someone has already told it. Even if the forms into which it can shape and reshape that knowledge are almost infinite, and sometimes frighteningly (if perhaps accidentally) acute.

What interested me more, in my dalliance with the site, was to see what it did with very close-to-artist briefings. Waterlilies in the style of Monet. Spots in the style of Damien Hirst. Wheat fields in the style of Van Gogh. How close to the real thing can it go? With most of these, not very close — the waterlilies were just very blurry (although Monet's murky purple underpainted depths were surprisingly well rendered); the wheat fields were clunky and childish; the spots were, well, wrapping paper. A request for a man on a hill in the style of Antony Gormley elicited a sort of big clumsy Tintin with a moorland sky behind. Anything at all to do with Picasso was laughably terrible.

> Some artists might feel offended by the way their work is regurgitated in a form amounting to parody

But come to a David Hockney swimming pool and the results (Dall-E-2 gives you four different offerings each time, and four more if you ask again; you can also edit them at will) were surprisingly sophisticated: although never veering too close to that bigger splash, there were renderings of different phases and techniques in the artist's work. And the images weren't so bad — at about the level of a competent illustrator. I hesitate to say this could have something to do with the nature of the original.

The point of this exploration? To work out whether in fact artists have any reason to feel threatened by GAI machinations such as these. On the basis of my cursory research, clearly they don't — though some might feel offended or even enraged by the way their work is regurgitated in a form that pretty much amounts to parody. Even if the whole lot could be filed under Massively Missing The Point.

More seriously, what does this mean for old-school notions of copyright and intellectual property? Does Hockney hold any rights over turquoise pools with a stripy undertow? Does Hirst own spot patterns? Obviously not — but still we know a rip-off when we see it. And there are aggrieved yelps across the digital world from creators who know that massively profitable sites are built by scraping the internet for their original work.

These issues have been gnawed over ever since this kind of software first emerged. With Dall-E-2, the law is already clear: "in the eyes of the Copyright Office, the public is free to reproduce, publish, or sell" any old piece of rubbish you create — whoops, sorry, "your Dall-E 2-generated masterpiece" — with no strings attached. Its creators freely admit that the GAI has been "trained", as I've learnt to call it, with copyright images and original work that might come under all sorts of restrictions, but there's no actual crime here, it seems.

Possibly not. The debates continue. What surprises me most about the back-and-forth around the subject is a pervasive view that GAIs are capable of creating beautiful and skilful images that might actually fool someone, or replace an artist's real work. If that's true, I must have been looking in the wrong place.

Jan Dalley is the FT's Arts editor. Jo Ellison is away

The FT Weekend Quiz of the Year: the answers

1 C: Taylor Swift **2 B:** salet **3 D:** Saudi Arabia **4 B:** 'Don't Doubt ur Vibe' **5 A:** 'Stranger Things' **6 A:** Spain **7 B:** Gaslighting **8 B:** Brad Pitt and Nick Cave **9 A:** 21,450 **10 C:** Singing 'Happy Birthday' to John F Kennedy **11 D:** Shane MacGowan **12 D:** £299mn **13 A:** Too financially risky **14 A:** Margot Robbie **15 B:** Why he does his own stunts **16 A:** Origami **17 C:** 'The Imaginary Invalid' **18 D:** Cloud Bread **19 A:** Georg Solti **20 B:** 160 units **21 A:** Orhan Pamuk **22 B:** The player is Stryker, a gun-toting gumshoe who fights mobsters in the city of Peccadillo **23 B:** In the afterlife following his own death **24 B:** Rudy Giuliani **25 B:** The only castrato soloist to be recorded **26 D:** Heckling a child singer **27 C:** Paul Allen **28 A:** It was made of a liquid fabric that was sprayed on to her **29 A:** India **30 A:** Vladimir Putin

TOWARDS A DREAM

LOUIS VUITTON